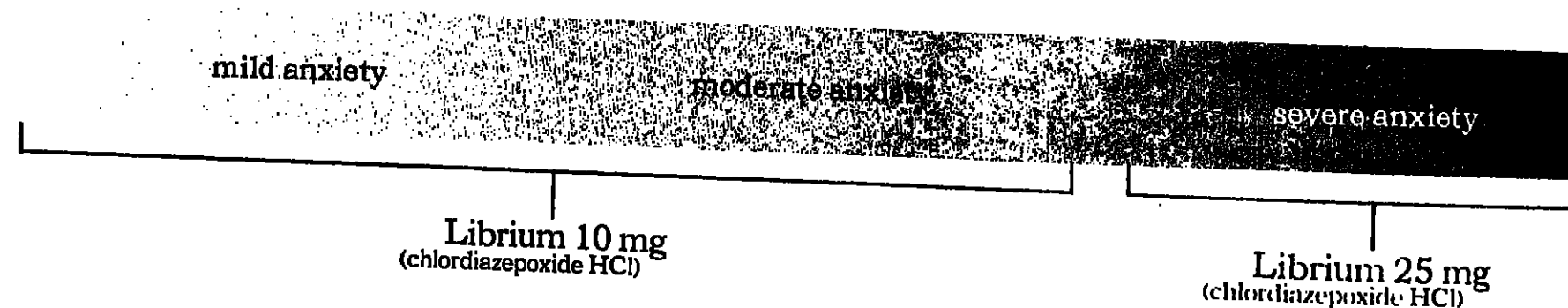


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A B C D

Med Trib 6

Medical Tribune

Vol. 16, No. 6

world news of medicine and its practice—fast, accurate, complete

and Medical News—
Wednesday, February 12, 1975

making rounds
at press time

Hostility to Abortion Blocks Massachusetts Fetal Studies



Research aimed at developing better diagnostic tools has been affected by Massachusetts anti-abortion forces. Clinical trials have been stopped on the fetuscope, an instrument made of fiberoptic bundles with optical lenses that permits examination of a fetus in utero. Above, a physician using a fetuscope. Below, fetal finger parts in vivo. A channel provides for withdrawal of fetal blood samples.

Medical Tribune Report

BOSTON—Fetal research in Massachusetts has come to a virtual standstill because of the public attitude here toward abortion and the use of the aborted fetus, even in cases in which the research was designed to develop better diagnostic tools.

Speaking at a recent symposium which discussed the ramifications of a recently enacted state law restricting fetal research, Dr. David Nathan, Associate Professor of Pediatrics at the Harvard Medical School, noted that

Continued on page 12

Bronchopulmonary Lavage Shows: Occult Bleeding in 3 Taking Anticoagulants

Medical Tribune Report

LOS ANGELES—Occult pulmonary hemorrhage has been reported as an "important" complication of anticoag-

ulant therapy, but its incidence, while thought to be quite low, has remained unknown.

The diagnosis was made by bronchopulmonary lavage in three patients by Dr. D. W. Golde, Assistant Professor of Medicine at UCLA School of Medicine, and Dr. T. N. Finley, director of the pulmonary laboratory at Mount Zion Medical Center in San Francisco, and Professor of Medicine at the University of California at Davis.

Hemoptysis was "conspicuously absent" in all three patients. Two of the patients were on long-term coumadin therapy and the third was on heparin. Two recovered with reversal of anticoagulation, but the third died (autopsy showed diffuse pulmonary hemorrhage).

Dr. Golde praised the technique of bronchopulmonary lavage, as a "relatively noninvasive and safe" way to diagnose occult pulmonary bleeding in

these patients and said reversal of anticoagulation may be lifesaving.

He and Dr. Finley said they have also used the technique to make this diagnosis in leukemia patients, and that occult pulmonary hemorrhage may be much more common in leukemia patients than had been previously thought.

Symptoms in the three anticoagulated patients consisted of "rapidly developing pulmonary infiltrates and unexplained anemia." Anticoagulant activity was shown to be within normal range.

Alveolar macrophages were obtained by bronchopulmonary lavage done under local anesthesia, and then isolated and stained for hemosiderin and hemoglobin.

The hemosiderin scores—based on staining intensity—of the patients were compared to those of six healthy volunteers. The patients' scores were "at least 10 times normal." The alveolar

Continued on page 18

CAR CLINIC

New Dieselized Dart Found To Offer Many Advantages

Because only salesmen put in more miles in their cars than physicians, who were hard hit in the gasoline crisis, Medical Tribune felt this article would be of unusual interest to them.

By J. EDWARD McDERMOTT, M.D.

Soaring gasoline prices have caused many motorists—and physicians who must drive considerable distances—to consider a diesel automobile. However, the most commonly available diesel has been so high priced that many

have questioned the overall economics.

Realizing that American manufacturers turn out most of the world's diesel trucks, the question has often been asked: why has some American manufacturer not produced a feasibly priced diesel auto? In the past, purchasers were forced to look to Europe for diesel powered cars. However, there now appears to be an American alternative, or at least a diesel produced by an American company.

Continued on page 15

Hospital Classification Held A Key Step in EMS Process

By LINDA MURRAY
Special Tribune Correspondent

One of the most controversial issues in developing an emergency medical service system is the process of classifying hospitals' emergency facilities and capabilities in a meaningful way so that injuries can be referred to the appropriate institution and then transferred

Part II

to more advanced centers for specialized care as needs are identified. Deciding on what basis to categorize, who should do it and whether it should be compulsory or voluntary can provoke explosive confrontations between bureaucrats and hospital administrators on one hand, and between hospital administrators and physicians with ER duty on the other.

One bureaucrat who by law was extended the task of classification described the hostile atmosphere as akin to "walking into Saudi Arabia if you were Jewish."

Unpopular though it may be, hospital categorization, according to the creators of the state-wide system in Illinois is top priority. "Categorization is only the first, and most important of the necessary steps to a true regional EMS systems implementation," they wrote in an article in the *Illinois Medical Journal* (Boyd, et al., July 1974).

In Illinois, hospitals were classified both in terms of capability and their role in areawide planning. While self-categorization according to capability was at first voluntary in Illinois, it became mandatory on July 1, 1973 for every hospital with an ER to classify its service as standby (an R.N. on duty and a physician on call), basic (an M.D. in the ER 24 hours a day with specialties, backup laboratory and pharmacy on call), or comprehensive (basic plus subspecialties on call and 24-hour staffing of lab and x-ray departments). In addition, hospitals were required to participate in one of 40 geographical systems, revolving around a Regional Trauma Center, located in a community with a university health education complex.

Help for Hospital Doctor

What this means for the doctor in the community hospital is that he can now get some help making a decision about definitive care by calling the regional trauma coordinator and discussing the extent of injuries, what has been done so far, suggestions from the coordinator on care and transfer.

"There's a continuing educational process, an exchange of ideas and information between the family physician and the specialist that makes the small-town doctor feel he's part of a team instead of wringing his hands alone as the old country doctor," says Dr. John Otten, chairman of the Committee on Trauma of the American College of Surgeons and medical coordinator of the regional trauma center at St. Francis Hospital in Peoria.

When categorization came to Peoria, there were two hospitals—St. Francis which had a well-established emergency service and a Methodist hospital

with a token emergency room but a flourishing cancer radiation department.

"All of a sudden," recalls Dr. Otten, "they had to categorize themselves. They had to say where they were better." Instead of pushing its ER to fit into categorization, the Methodist hospital opted to expand and develop its radiation therapy while St. Francis concentrated on delivering better quality emergency service. Otherwise, there might have been unnecessary duplication of services. Dr. Otten comments: "The same kind of thought process went on in the minds of administrators all over the state. Where are we weak? Where are we strong?"

Since categorization, the procedure in the ER itself has changed radically. Traditionally, an accident victim was first seen by a general surgeon who attempted to assess his total injuries. If the surgeon thought there was a head injury, he would call the neurosurgeon at home. The whole process might take as long as three hours.

Priorities Set in 10 Minutes

Now, the emergency medical technician in the ambulance calls the ER and briefs the staff on the patient's condition. The trauma fellow, who is usually a general surgeon, is notified. If the patient has a fractured leg, the orthopedic surgeon is notified. Radiology and special techniques personnel are alerted so that that whole team is ready or nearly so when the patient comes through the door. Within ten minutes, the patient is examined and a priority list established.

"We haven't added a single person except the trauma fellow," Dr. Otten says with pride. "We just took the people, equipment and space, and reorganized them and used it all more efficiently."

Dr. Otten wasn't always such an enthusiastic supporter of the categori-



Dr. John Otten, chairman of the Committee on Trauma of the American College of Surgeons and medical coordinator of the regional trauma center at St. Francis Hospital in Peoria.



At St. Francis Hospital in Peoria, Ill., a regional trauma center, procedures have been developed to insure that the patient is examined by the whole team and a priority list established within 10 minutes.

zation concept. "As a surgeon in private practice, I was very skeptical of implementing a statewide system that was going to tell me what and how and when I should operate," he admits. "Many of us felt that way. We thought that working in a regional center drawing from 17 counties, we were going to get our heads worked off. Hell, we weren't going to get out of bed every night to take care of patients nobody else wanted. Now we have spread the work around. It was really a very selfish attitude."

But other doctors' doubts about the effects of categorization have not been put to rest. With considerable pressure to upgrade their services, many hospitals in rural, downstate Illinois have added more physician coverage of the ER, not always to the liking of the attending doctors. "The hospitals are trying to become the medical centers of the community," criticizes Dr. B.H. Neuchiller, a family practitioner in Woodstock, Illinois.

Until an infarction threatened his health, Dr. Neuchiller was required to perform ER duty at Memorial Hospital for McHenry County, a standby facility, in return for admitting privileges. Although hospital administrator Bertram Hanson claims the night shift falls to each physician only once every 23 days, that was too much for Dr. Neuchiller who finds all the EMS publicity has turned the ER into a primary care facility.

Nonemergency 'Emergencies'

"Most of the so-called emergencies are not emergencies at all," Dr. Neuchiller says. "Yet the hospital pressures the physicians into handling those cases. An ER physician must spend 12 hours out of his 24-hour shift in the hospital, away from his practice, family, and home for patients who are coming in at their convenience."

Administrator Hanson admits that the ER is "definitely abused." In fact, he says 45 per cent of the cases are not emergencies—and he concludes that some of the hospital's press releases may have encouraged the abuse. In fact, a recent quarterly report announced that the ER had serviced 852 cases during the month of July 1974 alone, an all-time high, credited chiefly to having a physician on the premises between 7 P.M. and 7 A.M. as a "special service for the public."

"That's nothing but a PR effort to get people to come into the ER for anything they want," Dr. Neuchiller says angrily. "It gives them the idea

just walk in and we'll have someone to take care of you."

Dr. Neuchiller is not the only one who is dissatisfied with the side effect of hospital classification. "None of us are happy with the putting categorization in practice," admits Dr. Eugene I. Nagel, an anesthesiologist and chairman of the A.M.A.'s Commission on F.M.S.

Categorization Guidelines

The Commission has devised categorization guidelines, endorsing an emergency department/room categories. About a dozen states have adopted some variation on the A.M.A. plan; the Illinois system. In Arkansas, the model was Illinois, E.M.S. director Jack Stout criticizes. "When Illinois tried to identify the single hospital in the region to be the regional trauma center and treat all sorts of problems, it made a lot of other hospitals mad. We decided that what we really wanted to know in a region was that somewhere there was the capability to handle a problem. Then we identified one hospital to specialize as a perinatal center, one as a burn center, and so forth. A little more palatable to the hospitals."

In Maryland, the plan is built around what Dr. R. Adams Cowley, Director of the Maryland Institute for E.M.S. at the Division of E.M.S., call "a coordinated volunteer system." Hospitals cooperating are left out of the system. There is also a specialty referral system. "If they can't have a good ER," explains Dr. Cowley, "maybe they can have a good drug addiction program, or alcoholic program or spend their money there."

Maryland is taking the areawide planning concept one step further in setting up the Mid-Atlantic E.M.S. Council which will tie together emergency facilities and systems in Maryland, West Virginia, Virginia, Pennsylvania, Delaware and Washington, D.C. in the first E.M.S. inter-state consortium. "We need to get people caught up with us," Dr. Cowley says. "There's no sense in re-inventing the wheel."

Duplication of efforts is also a concern of Dr. Nagel who claims in these areas who have experimented with categorization don't communicate with each other. To open up the channels, the Commission has decided to hold a meeting in late spring to bring together those with practical experience as well as representatives of H.E.W., the Department of Transportation.

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CLINICAL NEWS NOTE: "There's a continuing educational process, an exchange of ideas and information between the family physician and the specialist that makes the small-town doctor feel he's part of a team instead of wringing his hands alone as the old country doctor." (Dr. John Otten, see page 2.)

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Skin Monitor of Infant O₂ Tension Favored

Medical Tribune World Service

PRAGUE—Any infant in an incubator needing supplementary oxygen requires monitoring, and measurement of transcutaneous oxygen tension, using an oxygen electrode with a temperature regulating system, is a much more reliable method of monitoring arterial oxygen tension than the traditional intermittent sampling of the infant's blood, Dr. Gösta Rooth, of the Perinatal Research Unit of University Hospital, Uppsala, Sweden, told the Fourth European Congress of Perinatal Medicine.

The technique is easy and noninvasive, and makes possible continuous monitoring for several hours, he pointed out. After calibration, a Clark-type oxygen electrode is placed on the in-

fant's skin—on the sternum or below the umbilicus, for example—and heated. This produces vasodilation so that the capillary blood becomes arterialized.

Same as Arterial O₂ Tension

It has been demonstrated, Dr. Rooth said, that oxygen diffusing through the skin then has approximately the same tension as that of arterial blood, the transcutaneous tension reaching arterial levels after 10 or 15 minutes.

He stressed that blood samples taken at intervals do not give any information about the continuous variability in arterial oxygen tension and therefore lead to the administration of too much or too little oxygen. He

cited a case in which an infant received an overdose of oxygen—84 per cent concentration instead of the required 30 per cent—on the basis of a femoral artery blood sample. The error was caught by transcutaneous monitoring.

ECTOPIC BEAT

"Backyard gardens get visiting cats and squirrels, but they are easier to plant."

—New York Times.

And what's more, the tulips won't eat them.

(Regular beats: Immunaria Medica, page 23.)

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Exceptionally well absorbed oral broad spectrum antibiotic may be taken with meals

Larocin (amoxicillin) achieves high blood and urine levels

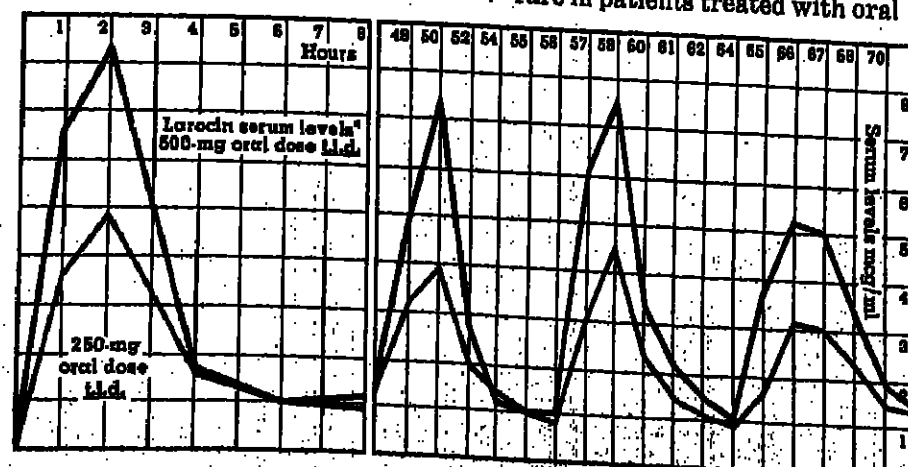
Low incidence of diarrhea to date in clinical studies

NUTLEY, N.J.—Roche Laboratories recently introduced an oral broad spectrum antibiotic: Larocin (amoxicillin). Larocin represents a significant contribution to antibacterial chemotherapy, one which will perform effectively in the treatment of a wide range of infections due to susceptible organisms (see chart at right).

Absorption called the key

The key pharmacologic characteristic of Larocin (amoxicillin) is its rapid and efficient absorption from the gastrointestinal tract. Not only is it stable in stomach acid, but the presence of food has no significant effect on the antibiotic's absorption. Thus Larocin may be taken by patients on a convenient t.i.d. schedule without regard to meals. The reconstituted oral suspension and pediatric drops may be added to liquids such as formula, milk, fruit juice or soft drinks for easy administration to small children.

Because of its efficient absorption characteristics, high blood and urine levels of Larocin (amoxicillin) are rapidly achieved. Peak serum levels average 4.2 mcg/ml two hours after a single 250-mg oral dose and 7.5 mcg/ml one hour after a single 500-mg oral dose—both levels approximately twice as high as those obtained with equal doses of ampicillin.^{1,2}



On a multiple-dose regimen, when given every eight hours for 8 days, the lowest mean serum levels of Larocin approximated 1.0 mcg/ml after 250 mg and 1.25 mcg/ml after 500 mg.³ Although the therapeutic range of blood levels for the penicillins is not well established, these results demonstrate that blood levels may be expected to remain above the MIC's for all of the nonurinary pathogens susceptible to Larocin when it is administered at clinically recommended doses (see chart below).

Most of Larocin is excreted unchanged in the urine.² Average urinary excretion within 6 to 8 hours after oral administration ranges from 40 to 70% for the 250-mg dose and 50 to 70% for the 500-mg dose.^{1,2}

1. Croydon EAP, Sutherland R: *Antimicrob Agents Chemother*—1970, pp. 427-430. 2. Neu HC, Winshell EB: *Antimicrob Agents Chemother*—1970, pp. 423-426. 3. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 4. Leigh DA: *Chir Med Res Opin* 7:10-18, 1972. 5. Bodey GP, Nance J: *Antimicrob Agents Chemother* 1:358-362, 1972.

Hypersensitivity reactions can occur

As with other penicillins, it is anticipated that adverse reactions to Larocin (amoxicillin) will be largely limited to sensitivity phenomena. While anaphylaxis is rare in patients treated with oral

GRAM-POSITIVE	
Alpha-hemolytic streptococci	●●●●●
Beta-hemolytic streptococci	●●●●●
Streptococcus faecalis	●●●●●
Diplococcus pneumoniae	●●
Nonpenicillinase-producing staphylococci	●●●●
GRAM-NEGATIVE	
Haemophilus influenzae	●●●●●
Escherichia coli	●●●●●
Proteus mirabilis	●●●●●
Neisseria gonorrhoeae	●●

In vitro bactericidal activity

Note: Because Larocin (amoxicillin) does not resist destruction by penicillinase, it is not effective against penicillinase-producing bacteria such as resistant staphylococci. All strains of Pseudomonas and most strains of Klebsiella and Enterobacter are resistant.

penicillins, the possibility must nevertheless be kept in mind. Larocin is contraindicated in patients with a history of penicillin hypersensitivity. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT. (See Warnings section of complete product information, a summary of which appears at right.)

Efficacy demonstrated in many infections

Amoxicillin has been administered successfully to patients with a wide range of commonly seen infections due to susceptible organisms.* Over-all clinical evaluation of amoxicillin therapy was considered a "success" or "improvement" in 1287 of 1850 evaluable cases (93.8%).†

Ages of the 1850 patients studied ranged from under one year to over 80 years. Larocin capsules were administered to 800 patients and oral suspension to the remaining 1050. Dosage of the capsules ranged from 250 mg t.i.d. (the most frequently used dosage) to a single 3-Gm dose for the treatment of acute uncomplicated gonorrhea. Dosage of the oral suspension ranged from 50 mg t.i.d. to 250 mg t.i.d., with 125 mg t.i.d. the most frequent. The majority of patients were treated from seven to 10 days. A breakdown by type of infection follows:

Otitis Media: The pathogens most commonly isolated were *Diplococcus pneumoniae* and *Haemophilus influenzae*. Of 130 cases with this diagnosis, 122 (93%) were rated as a "success" or "improvement" after treatment with Larocin (amoxicillin).

Streptococcal Sore Throat: A success rate of 86% (174 of 202 cases) was observed with Larocin against the responsible pathogen, beta-hemolytic streptococci. The great majority of the 202 patients in this group were children who received the oral suspension.

Other Upper Respiratory Infections: Beta-hemolytic streptococci were the offending organisms for most of the infections in this group, which were diagnosed primarily as pharyngitis with some cases of tonsillitis and a few cases of sinusitis. A success rate of 82% (66 of 80 cases) was achieved with Larocin.

Lower Respiratory Infections: Treatment with Larocin resulted in "success" or "improvement" in all of the 52 cases in which *Diplococcus pneumoniae* was cultured. *Staphylococcus aureus* was also cultured in 26 of the 98 cases; Larocin showed "success" or "improvement" in 96% (25 of 26 cases). The most common clinical conditions were bronchitis and bronchopneumonia.

Urinary Tract Infections: Cystitis, pyelonephritis and asymptomatic bacteriuria were the most frequent clinical diagnoses in this group. Of the 404 cases evaluated, *Escherichia coli* was cultured in 306 cases and treatment with Larocin resulted in "success" or "improvement" in 284 cases (93%). *Proteus mirabilis* was cultured in 70 patients, with Larocin effective in 67 (96%).

Skin and Soft Tissue Infections: *Staphylococcus aureus* was cultured in 108 cases, with "success" or "improvement" in 104 (96%); while beta-hemolytic streptococci were cultured in 99 cases, with "success" in 97 (98%). Impetigo and abscess were the most frequent diagnoses.

Gonorrhea: Administered as a single 3-Gm oral dose, Larocin showed a success rate of 97% in both males (85 of 88 cases) and females (114 of 118 cases).

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110. †"Success" or "improvement" was determined by a combination of clinical and bacteriological criteria. In infections due to beta-hemolytic streptococci and *N. gonorrhoeae*, only successful cases were included.

Low incidence of side effects reported to date

During the clinical investigations with amoxicillin, all cases treated were evaluated for side effects. No side effects or laboratory abnormalities which would be considered unusual for a penicillin derivative were reported by any of the investigators.

In 2668 total courses of therapy with amoxicillin, therapy was discontinued in only 52 patients

Drug-Related Side Effects Associated with Amoxicillin

Based upon 2668 courses of therapy: 1811 with the capsules and 847 with the oral suspension.

SIDE EFFECT	CAPSULES		SUSPENSION	
	#	%	#	%
Diarrhea	24	1.3	18	2.1
Rash	24	1.3	17	2.0
Nausea	7	0.4	1	0.1
Urticaria	8	0.4	2	0.2
Moniliasis	7	0.3		
Nausea/Vomiting	4	0.2		
Diarrhea/Nausea	3	0.1		
Vomiting	2	0.1	4	0.4
Dizziness	2	0.1		
Colitis	2	0.1		
Nausea/Headache	2	0.1		
Rash/Urticaria	2	0.1	1	0.1
Esophageal Spasm	1	0.05		
Stomachache	1	0.05	1	0.1
Belching	1	0.05		
Drowsiness	1	0.05		
Belching/Numbness/Tingling/Itching	1	0.05		
Fever/Itching	1	0.05		
Difficult Breathing	1	0.05		
Mucus in Pharynx	1	0.05		
Diarrhea/Urticaria	1	0.05		
Diarrhea/Vomiting	1	0.05	4	0.4
Dizziness/Headache	1	0.05		
Conjunctival Erythema	1	0.05		
G.I. Bleeding	1	0.05		
Abdominal Cramps	1	0.05		
Diarrhea/Rash	1	0.05		
Rash/Diarrhea/Vomiting	1	0.05		
Sore Tongue			1	0.1
Rash/Vomiting			1	0.1
TOTAL	102	5.6	52	6.1

(1.9%) because of drug-related side effects. Laboratory abnormalities possibly related to amoxicillin occurred infrequently.

In these studies, there was a low incidence of diarrhea reported with amoxicillin capsules—1.7% or 30 of 1811 patients. Especially noteworthy was the low incidence of diarrhea reported with amoxicillin oral suspension—only 2.8% or 24 of 847 patients, significantly less ($p < 0.05$) than the incidence of diarrhea with ampicillin oral suspension (5.8% or 15 of 282 patients).

In breaking down the over-all incidence of diarrhea by age groups, it was found that in the group from 0 to 1 (newborn and 1-year-old infants), 13 of 108 patients receiving amoxicillin oral

suspension developed diarrhea, for an incidence of 12%. This represents over one-half the total number of diarrhea cases seen in the 847 patients treated with amoxicillin oral suspension.

Throughout each of the remaining age categories, starting from age 2 to 10 and in the general grouping from age 11 to 20, the incidence of diarrhea in patients treated with amoxicillin oral suspension ranges from 2% down to 0 in the older groups. There were few cases of diarrhea beyond the age of six.

The incidence of diarrhea with Larocin (amoxicillin) can therefore be expected to be considerably higher in the newborn and infant age groups than in older children, which is true of all antibiotics.

Usual Adult and Pediatric Dosages

INDICATION	STRAIN ISOLATED	ADULT DOSAGE	PEDIATRIC DOSAGE*
Infections of the ear, nose, throat	Streptococci, pneumococci, nonpenicillinase-producing staphylococci, H. influenzae	250 mg t.i.d.	Oral Suspension: 20 mg/kg/day in divided doses t.i.d. Drops: Under 6 kg (13 lbs): 0.5 ml t.i.d.; 6-8 kg (13-18 lbs): 1 ml t.i.d.
Infections of the lower respiratory tract	Streptococci, pneumococci, nonpenicillinase-producing staphylococci, H. influenzae	500 mg t.i.d.	Oral Suspension: 40 mg/kg/day in divided doses t.i.d. Drops: Under 6 kg (13 lbs): 1 ml t.i.d.; 6-8 kg (13-18 lbs): 2 ml t.i.d.
Infections of the genitourinary tract	E. coli, Proteus mirabilis, Strep. faecalis	250 mg t.i.d.	Oral Suspension: 20 mg/kg/day in divided doses t.i.d. Drops: Under 6 kg (13 lbs): 0.5 ml t.i.d.; 6-8 kg (13-18 lbs): 1 ml t.i.d.
Infections of the skin and soft tissues	Streptococci, susceptible staphylococci and E. coli	250 mg t.i.d.	Oral Suspension: 20 mg/kg/day in divided doses t.i.d. Drops: Under 6 kg (13 lbs): 0.5 ml t.i.d.; 6-8 kg (13-18 lbs): 1 ml t.i.d.
Severe infections, or infections caused by less susceptible organisms		500 mg t.i.d.	Oral Suspension: 40 mg/kg/day in divided doses t.i.d.
Gonorrhea, acute uncomplicated	N. gonorrhoeae	3 grams—single oral dose	

*Note: Children weighing more than 8 kg (18 lbs) should receive the appropriate dose of the Oral Suspension: 125 mg or 250 mg/5 ml. Children weighing more than 20 kg should be dosed according to adult recommendations.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Infections due to susceptible strains of the following gram-negative organisms: *H. influenzae*, *E. coli*, *P. mirabilis* and *N. gonorrhoeae*; and gram-positive organisms: streptococci (including *Streptococcus faecalis*), *D. pneumoniae* and nonpenicillinase-producing staphylococci. Therapy may be instituted prior to obtaining results from bacteriological and susceptibility studies to determine causative organisms and susceptibility to amoxicillin.

Contraindications: In individuals with history of allergic reaction to penicillins.

WARNINGS: SERIOUS AND OCCASIONALLY FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS REPORTED IN PATIENTS ON PENICILLIN THERAPY, ALTHOUGH MORE FREQUENT FOLLOWING PARENTERAL THERAPY, ANAPHYLAXIS HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. MORE LIKELY IN INDIVIDUALS WITH HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. BEFORE THERAPY, INQUIRE CONCERNING PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, OR OTHER ALLERGENS. IF ALLERGIC REACTION OCCURS, INSTITUTE APPROPRIATE THERAPY AND CONSIDER DISCONTINUANCE OF AMOXICILLIN. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, ADMINISTER OXYGEN, INTRAVENOUS STEROIDS AND AIRWAY MANAGEMENT, INCLUDING INTUBATION, AS INDICATED.

Usage in Pregnancy: Safety in pregnancy not established.

Precautions: As with any potent drug, assess renal, hepatic and hematopoietic function periodically during prolonged therapy. Keep in mind possibility of superinfections with mycotic or bacterial pathogens; if they occur, discontinue drug and/or institute appropriate therapy.

Adverse Reactions: As with other penicillins, untoward reactions will likely be essentially limited to sensitivity phenomena and more likely occur in individuals previously demonstrating penicillin hypersensitivity and those with history of allergy, asthma, hay fever or urticaria. Adverse reactions reported as associated with use of penicillins: Gastrointestinal: Nausea, vomiting, diarrhea. Hypersensitivity Reactions: Erythematous maculopapular rashes, urticaria. NOTE: Urticaria, other skin rashes and

serum sickness-like reactions may be controlled with antihistamines and, if necessary, systemic corticosteroids. Discontinue amoxicillin unless condition is believed to be life-threatening and amenable only to amoxicillin therapy. Liver: Moderate rise in SGOT noted, but significance unknown. Hematologic and Lymphatic Systems: Anemia, thrombocytopenia, thrombocytopenic purpura, eosinophilia, leukopenia, agranulocytosis. All are usually reversible on discontinuation of therapy and believed to be hypersensitivity phenomena.

Dosage: Ear, nose, throat, genitourinary tract, skin and soft tissue infections—Adults: 250 mg every 8 hours. Children: 20 mg/kg/day in divided doses every 8 hours; under 6 kg, 0.5 ml of Pediatric Drops every 8 hours; 6-8 kg, 1 ml of Pediatric Drops every 8 hours. Lower respiratory tract infections and severe infections or those caused by less susceptible organisms—Adults: 500 mg every 8 hours. Children: 40 mg/kg/day in divided doses every 8 hours; under 6 kg, 1 ml of Pediatric Drops every 8 hours; 6-8 kg, 2 ml of Pediatric Drops every 8 hours. Gonorrhea (acute uncomplicated anogenital and urethral infections)—Males and females: 3 grams as a single oral dose. NOTE: Children weighing more than 8 kg should receive appropriate dose of oral suspension 125 mg or 250 mg/5 ml. Children weighing 20 kg or more should be dosed according to adult recommendations.

Note: In gonorrhea with suspected lesion of syphilis, perform dark-field examinations before amoxicillin therapy and monthly serological tests for at least four months. In chronic urinary tract infections, frequent bacteriological and clinical appraisals are necessary. Smaller than recommended doses should not be used. In stubborn infections, several weeks' therapy may be required. Except for gonorrhea, continue treatment for a minimum of 48-72 hours after patient is asymptomatic or bacterial eradication is evidenced. Treat hemolytic streptococcal infections for at least 10 days to prevent acute rheumatic fever or glomerulonephritis.

Supplied: Amoxicillin as the trihydrate: Capsules, 250 mg and 500 mg; oral suspension, 125 mg/5 ml and 250 mg/5 ml; pediatric drops, 50 mg/ml.

Larocin (amoxicillin)

an important contribution to oral broad spectrum antibiotic therapy

ROCHE

Street Remedies for O.D. May Complicate Treatment

Medical Tribune Report

SAN FRANCISCO—Physicians should be alert to the possibility that a patient brought in for emergency treatment of an acute drug overdose may already have been subjected to street remedies, according to the director of the detoxification unit at the Haight-Asbury Medical Clinic here.

Dr. George Gay told the North American Congress on Drug and Alcohol Problems that the "battered flower child" may be a victim of such remedies. This patient is commonly young, white, unkempt, with "hippie patina," showing depressed vital signs and superficial trauma and should be checked for "boxer's mouth," teeth broken as friends tried to arouse him.

Street Remedies

He may also have been given a "speed reversal" (an "upper" designed to reverse the "down" of the overdose), a "heavy salt trip" (a subcutaneous injection of salt that, according to street mythology, will bind heroin and arouse an O.D. victim), or a "milk run" (an injection of milk thought to bind heroin) by well-meaning friends, Dr. Gay said.

Further injection of infected materials may produce "cotton fever," which can be fatal, and the injection of foreign substances can cause anything from a mild allergic to a fatal anaphylactic reaction, he said.

Physicians should be alert, Dr. Gay continued, to the "tremendous medical and surgical problems attendant to the use of intravenous drugs."

These include "anything that can happen to the skin," dental and gingival disorders, jaundice, septicemia, hepatitis, thromboembolic problems, cardiac complications of all types, metastatic lesions of the bone, an "endless list of pulmonary complications," and infection from "every imaginable common and exotic type of organism."

Emergency Treatment

Dr. Margaret McCarron of the University of Southern California Medical Center, said that an oral airway should be used if an overdose patient is not ventilating. She advised against routine use of an endotracheal tube because of the possibility of perforation.

The endotracheal tube, she said, should be used only for severe respiratory depression not due to narcotics, aspiration into the trachea, protection from aspiration, or in a patient in a coma deep enough to prevent the gag reflex.

Dr. McCarron emphasized the importance of assessing depth of coma since this can affect treatment, and reassessing the patient during treatment since a coma may deepen if drugs are still being absorbed into the system.

She also advised routine blood chemistries and blood sugar and urine tests since such problems as diabetes and hyperglycemia may be misdiagnosed or overlooked and many overdose victims have also had strokes.

In addition to the clinical assessment, such clues as needle tracks, skin burns, and constriction of the small blood vessels may help determine the type of drug involved, she said.

If the patient appears to be a narcotics addict, naloxone hydrochloride should be given subcutaneously in small doses, Dr. McCarron said, but she warned against releasing a patient who has received the narcotic antagonist and apparently recovered from the overdose. The agent is short-acting, only 45 to 60 minutes, she explained,

One-Year Contraceptive



A biodegradable capsule holding a year's supply of a birth-control drug has been developed by an M.I.T. group headed by Dr. Paul Newberne, above. The subdermal capsule is broken down and absorbed by normal body action.

and a patient should be kept for observation at least 42 hours in case the overdose effects recur.

Hepatitis B Vaccine Tested; Immunogenic, Noninfectious

BY JAMES MAGEE
Medical Tribune World Service

MILAN, ITALY—Results of initial tests with an experimental hepatitis B vaccine prepared from purified hepatitis B surface antigen show that it is immunogenic and not infectious.

Work in the field also points to a synthetic HB_s Ag peptide vaccine, according to Dr. Saul Krugman, Professor and chairman of the Department of Pediatrics at New York University Medical Center. "An immunizing agent of this type," he said, "could have the advantage of being devoid of genes of viral or cellular origin as well as being non-infectious."

Studies with heat-inactivated serum containing the MS-2 strain of hepatitis B virus have already indicated that it

should be feasible to develop a vaccine utilizing purified preparations of HB_s Ag. The availability of sophisticated biophysical and biochemical techniques has enabled various investigators to separate the noninfectious Dane particles.

Large quantities of the purified antigen can be extracted from the plasma of chronic HB_s Ag carriers, and several investigators have prepared candidate inactivated vaccines from purified preparations of HB_s Ag. Dr. Krugman told a symposium on viral hepatitis at a meeting of the International Association of Biological Standardization here.

Dr. Krugman summarized the results of chimpanzee studies as follows:

- Inoculation of plasma containing HB_s Ag/aw in one animal was followed by hepatitis B infection; HB_s Ag was detectable one month after inoculation and the SGPT values became abnormal two months after inoculation.
- Subcutaneous inoculation of purified HB_s Ag/aw (no formalin) in one animal was not infectious (normal SGPT, no detectable HB_s Ag, and no detectable anti-HB_s), but it was antigenic (detectable anti-HB_s).
- Subcutaneous inoculation of formalin-inactivated purified HB_s Ag/aw in two animals and formalin-inactivated purified HB_s Ag/adr in one animal was antigenic and not infectious.
- Neither the uninoculated animal nor the one that received vaccine diluent showed evidence of infection.

After six months of observation the immunized animals were challenged with infectious plasma. These studies are currently in progress, said Dr. Krugman.

EDITORIAL

Brief summaries of editorials and comments in current medical and scientific journals.

The Physician-Assistant

"The idea of a primary-care assistant to the physician has been accepted widely by the government, professionals, and consumers in the U.S. But the absolute need for basic changes—changes in the financing system, in patterns of medical practice, and in the content of medical education—has not been generally recognized and is far from being accepted."

"The medical profession and its teaching institutions are beginning to acknowledge that the physician's role needs to change before we will have adequate primary care. Yet narrowly focused hospital-based specialties with an intense research emphasis are the patterns of practice that form the basis of most medical training. Until there is recognition of the changes which must come—and, more than recognition, real movement on the part of teachers and providers—the U.S. citizen-consumer is doomed to receive second-class primary care in the context of a fragmented, wasteful, high-cost delivery system riddled with inequities and inadequacies."

"Many of the failures of the current system can be traced directly to undisciplined use of generous resources. Paradoxically, as a nation the U.S. is 'too rich,' and that is too bad for the sick." (Special article, William I. Blackwell, Diana Chapman Walsh, Martha M. Tanner, *The Lancet* 2: 1241, *The Lancet* Nov 23, 1974)

Antitrypsin Deficiency

"The discovery of antitrypsin deficiency has served to focus attention clearly on the requirements for connective tissue degradation in the remodeling of lung structure from the normal to the emphysematous form. There seems to be no doubt that proteolysis of extracellular fibrous tissues must precede the development of emphysema."

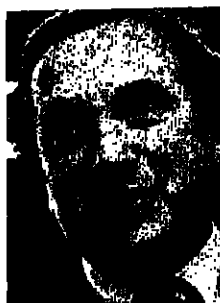
"The practical questions for the busy practitioner are which patients should be examined for antitrypsin deficiency... The likelihood of antitrypsin deficiency is greatest in subjects who develop obstructive pulmonary disease before the age of 40, especially in the absence of cigarette smoking or with a history of emphysema in the family."

"Whenever the deficiency is suspected, a serum protein electrophoresis should be run."

"Having determined that a patient is severely deficient in antitrypsin, is there any point in further documentation of the precise antitrypsin phenotype? One might argue that since effective treatment for the defect does not exist, it is pointless to document the type or kind of deficiency, however, we submit that it is better practice to have precise information and to present this information to the patient and to his family wherever appropriate." (Editorial, J.A. Pierce, M.D., and T.A. Dew, M.D., *Southern M.J.* 67:1140, Oct., 1974)

IN CONSULTATION

What's new and important in polymyalgia rheumatica and rheumatoid arthritis?



The Consultant

DR. CHARLES M. PLOTZ

Chairman, Department of Family Practice and Director of Continuing Education, Professor of Medicine, State University of New York Downstate Medical Center, Brooklyn, N.Y.

First of all, one must clearly distinguish between the two diseases. Polymyalgia rheumatica is a syndrome consisting of painful muscles, particularly those of the pelvic and pectoral girdles occurring primarily in the over 60 age group. The only arthritis which is involved is that which is customarily seen in people of this age.

What is most significant in polymyalgia rheumatica is the absence of any objective findings on physical examination or x-ray. Both diseases, however, have a cardinal manifestation and that is marked elevation of the erythrocyte sedimentation rate. Both are also often associated with low grade anemia and sometimes with low grade fever.

Rheumatoid arthritis, however, has striking objective physical findings which are not present in polymyalgia rheumatica. The other important fact to note is that there is approximately a 40 per cent coincidence of polymyalgia rheumatica and giant cell arteritis. While vasculitis is sometimes present in the course of rheumatoid arthritis, it is of a necrotizing variety and considerably different from the giant cell arteritis, both in pathological and clinical manifestations.

Both diseases are similar in that they respond dramatically and strikingly to corticosteroids. However, while few people would prescribe this class of drug for ordinary rheumatoid arthritis it is almost always given, even by conservative clinicians, for polymyalgia rheumatica.

What is the general relationship between polymyalgia rheumatica and temporal arteritis?

Temporal arteritis is simply one manifestation of the overall vascular condition known as giant cell arteritis. Actually, involvement of the temporal artery is relatively trivial, giving rise to some throbbing headache. However, the arteritis going on in the temporal artery is an indication of what is going on in other cranial arteries and there the clinical manifestations may be most dramatic and in worst forms can lead to sudden blindness.

About 20 per cent to 50 per cent (average 40 per cent) of patients with polymyalgia rheumatica have biopsy or other evidence of giant cell arteritis. Approximately the same number of patients with giant cell arteritis have the syndrome of polymyalgia rheumatica. This indicates a very close relationship between the two, although no one is quite clear as to the exact nature of this relationship.

Certainly the threat of sudden blindness in the otherwise rather benign clinical syndrome of polymyalgia rheumatica is something which should be carefully considered by every clinician.

If the diagnosis of polymyalgia rheumatica is made, should a temporal artery biopsy be routine?

Ideally, temporal artery biopsy, which is a relatively benign procedure, should be carried out in every patient with polymyalgia rheumatica. It is sometimes difficult, however, to persuade patients who have no visual manifestations to have such an invasive procedure performed.

For this reason one might consider such non-invasive diagnostic tests as thermography in order to determine whether there are any areas of the temporal artery which seem to be involved with active arteritis. One should certainly be more vigorous in the use of corticosteroids when the threat of giant cell arteritis is present.

Next In Consultation

DR. ALLEN W. ROOT, Director, University Service, Professor of Pediatrics, University of South Florida, Petersburg, Fla.

... will discuss what's new and important in medical understanding of puberty, and answer questions that deal with clinical observations on delayed sexual maturation, diagnosis of hypogonadal states, and the recommended approaches to therapy in such cases.

What is the treatment for polymyalgia rheumatica and how long should it be followed?

Polymyalgia rheumatica has a spectrum of disease much like many other

Continued on page 21



from tension headache *

Let Florinal help release the patient from the aching, pressing, painfully tight feeling of tension headache. Its analgesic components help relieve pain while its sedative component helps relax the patient.

ANALGESIC plus SEDATIVE
Florinal®

Each tablet or capsule contains: Sandoptal® (butalbital) (Warning: May be habit forming) 50 mg.; caffeine, U.S.P., 40 mg.; aspirin, U.S.P., 200 mg.; phenacetin, U.S.P., 130 mg.

*Indications: Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows: "Possibly" effective: For use to relieve pain, in "conditions in which combined sedative and analgesic action is desired, such as, nervous tension and sleeplessness associated with pain or headache." Final classification of the less-than-effective indications requires further investigation.

Contraindications: Hypersensitivity to any of the components.

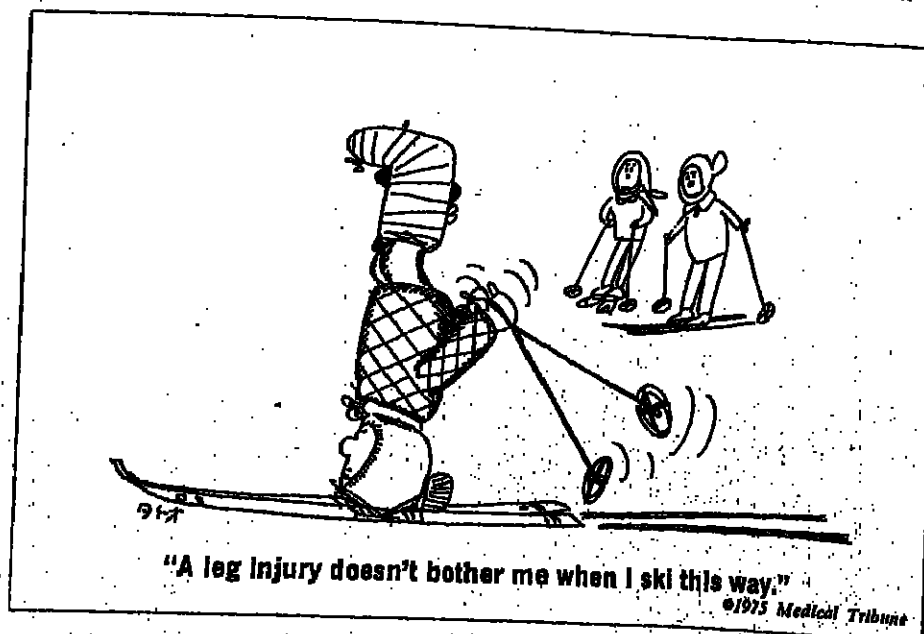
Precautions: Due to presence of a barbiturate, may be habit forming. Excessive or prolonged use should be avoided.

Side Effects: In rare instances, drowsiness, nausea, constipation, dizziness, and skin rash may occur.

Adult Dosage: One to two tablets or capsules, repeated if necessary up to 6 per day, or as directed by physician.

Before prescribing, see package insert for full product information.

RANDOLPH PHARMACEUTICALS, EAST MANHAWA, N.J. 08053



"A leg injury doesn't bother me when I ski this way."

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Apresoline®...where the action is in treating hypertension

(hydralazine)

Apresoline lowers blood pressure by exerting a peripheral vasodilating effect through a direct relaxation of arteriolar smooth muscle.



An antihypertensive idea whose time has come

Doctors who treat hypertension are increasingly interested in the one oral drug that has a mechanism of action exclusively its own—Apresoline.

Apresoline is in an antihypertensive class by itself because it reduces blood pressure through a unique mechanism. Acting at the ultimate site of hypertension, it directly relaxes arteriolar smooth muscle to decrease peripheral vascular resistance and arterial pressure. As blood pressure falls, there is an accompanying rise in cardiac output and rate.

Apresoline also maintains or increases renal and cerebral blood flow.

Apresoline minimizes postural hypotension

Nickerson¹ describes the action of Apresoline as follows:

"A preferential effect on arterioles, as compared to veins, allows the increase in cardiac output and minimizes postural hypotension; the latter is much less than that produced by agents blocking sympathetic nerves."

Apresoline avoids side effects associated with other agents

Such untoward reactions as drowsiness, lethargy, sedation, sexual dysfunction, and exacerbation of mental depression are not usually encountered with Apresoline. However, as with any antihypertensive agent, hydralazine should be used with caution where advanced renal damage exists.

Apresoline helps tailor the regimen to the patient

When Apresoline is added to an existing antihypertensive regimen, it introduces a different and complementary pharmacologic approach to the control of your patient's hypertension.

Apresoline thus affords the physician a variety of combinations with which he can construct regimens more closely molded to individual requirements. According to Freis,² such a combination of drugs, each with a different antihypertensive mechanism, is the most effective way to control blood pressure. This may also permit lower drug dosages.

Apresoline lends itself admirably to the contemporary antihypertensive rationale and its therapeutic goals: more vigorous and more effective control of blood pressure through a plurality of mechanisms.

Apresoline: used effectively in the VA studies

Apresoline was one of the three basic drugs used in two published VA cooperative studies.^{3,4}

References: 1. Nickerson M: Antihypertensive agents and the drug therapy of hypertension, in Goodman LS, Gilman A (eds): *The Pharmacological Basis of Therapeutics*, ed 4. New York, The Macmillan Company, 1970, p 729. 2. Freis ED: Hypertension: a controllable disease. *Clin Pharmacol Ther* 13:627-632, 1972. 3. Effects of treatment on morbidity in hypertension: Results in patients with diastolic blood pressures averaging 116 through 129 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 202:1028-1034, 1967. 4. Effects of treatment on morbidity in hypertension: II. Results in patients with diastolic blood pressure averaging 90 through 114 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 213:1143-1152, 1970.

Apresoline® hydrazinechloride (hydralazine hydrochloride)

TABULETS

Essential hypertension, alone or as an adjunct.
CONTRAINDICATIONS: Hypersensitivity; coronary artery disease; mitral regurgitant heart disease.
WARNINGS: Chronic administration of doses over 400 mg per day may produce an arthritis-like syndrome lead-

ing to a clinical picture simulating acute systemic lupus erythematosus. This may also occur at lower doses. Most of these reactions are reversible upon withdrawal of therapy, but long-term treatment with steroids may be necessary and residual blood counts, L.E. cell preparations and antinuclear antibody titer determinations are indicated before and periodically during prolonged therapy, even though patient is asymptomatic. These studies are also indicated in the presence of any unexplained symptoms.
Use MAO inhibitors with caution.

Usage in Pregnancy

The drug should be used only when, in the judgment of the physician, it is deemed essential to the welfare of the patient.
Use cautiously in suspected coronary artery or aortic disease, and advanced renal damage. Fetal hypotension may occur, and the pressor response to epinephrine may be reduced.
Peripheral neuritis, evidenced by paresthesias, numbness, and tingling, has been observed. Published evidence suggests an antipyridoxine effect

and addition of pyridoxine to the regimen if symptoms develop.
Blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, and purpura, have been reported rarely. If such abnormalities develop, discontinue therapy. Periodic blood counts are advised during prolonged therapy.
ADVERSE REACTIONS: Common: Headache; palpitations; anorexia; nausea; vomiting; diarrhea; tachycardia; angina pectoris. Less frequent: Nasal congestion; flushing; lacrimation; conjunctivitis; peripheral neuritis.

evidenced by paresthesias, numbness, and tingling; edema; dizziness; tremors; muscle cramps; psychotic reactions characterized by depression, disorientation, or anxiety; hypersensitivity (including rash, urticaria, pruritus, fever, chills, arthralgia, eosinophilia, and, rarely, hepatitis); constipation; difficulty in micturition; dyspnea; paralytic ileus; lymphadenopathy; splenomegaly; blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, and purpura; hypotension; paradoxical pressor responses.

DOSEAGE

Initiate therapy in gradually increasing dosages, adjust according to individual response. Start with 10 mg 4 times daily for the first 2 to 4 days, increase to 25 mg 4 times daily for balance of first week. For second and subsequent weeks, increase dosage to 50 mg 4 times daily. For maintenance, adjust dosage to lowest effective level.
The incidence of toxic reactions, particularly the L.E. cell syndrome, is high in the group of patients receiving large doses of Apresoline.
In a few resistant patients, up to 800 mg Apresoline daily may be required for a significant antihyper-

tensive effect. In such cases, a lower dosage of Apresoline combined with a thiazide, reserpine, or both may be considered. However, when combining therapy, individual titration is essential to insure the lowest possible therapeutic dose of each drug.
HOW SUPPLIED: Tablets, 10 mg (pale yellow, dry-coated); bottles of 100 and 1000.
Tablets, 25 mg (deep blue, dry-coated); bottles of 100, 500, and 1000.
Tablets, 50 mg (lilac, dry-coated); bottles of 100, 500, and 1000.

Tablets, 100 mg (peach, dry-coated); bottles of 100.
Consult complete literature before prescribing.
CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

C I B A

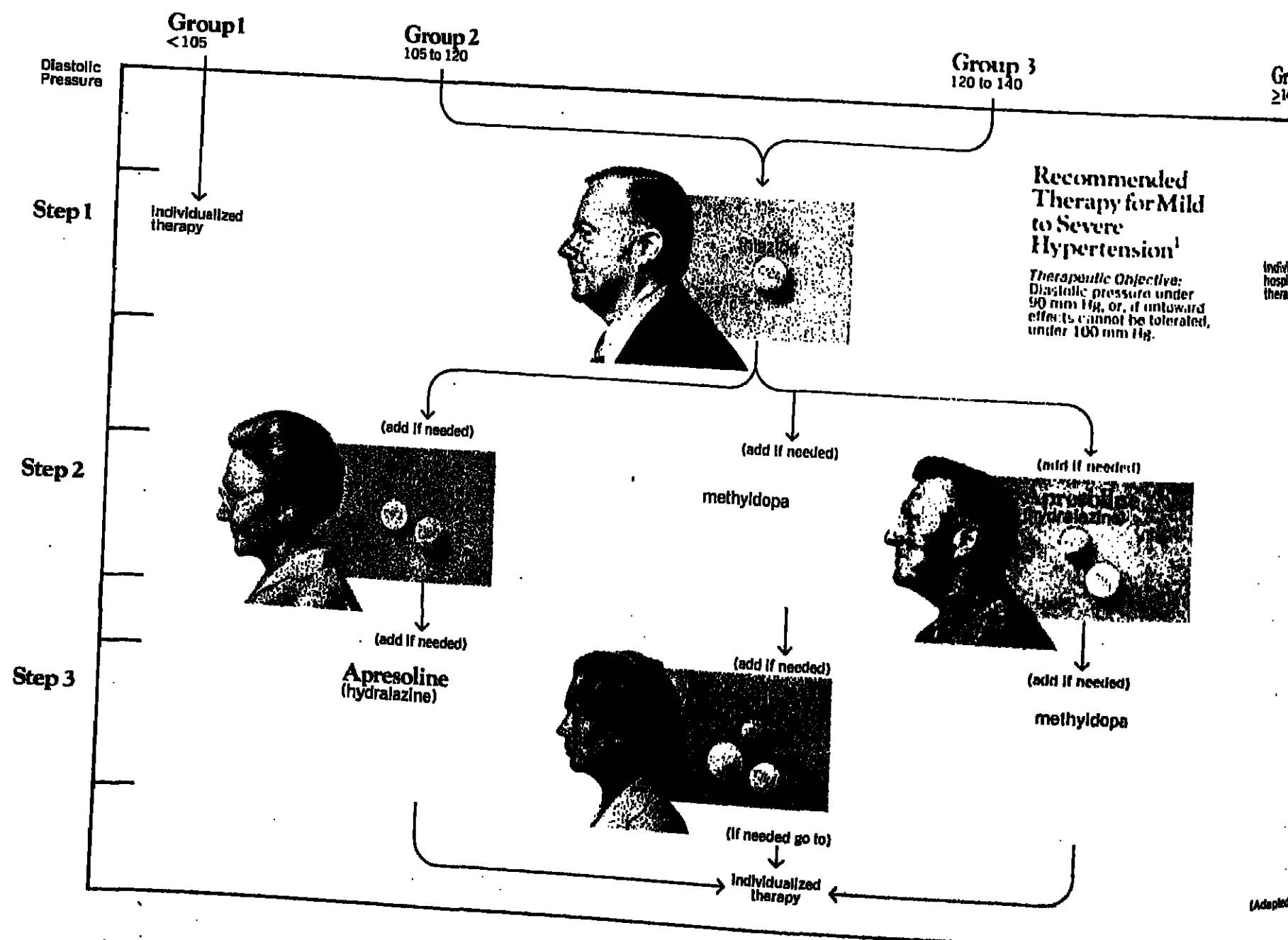
Apresoline... (hydralazine) part of the Hypertension Task Force "plan of action"

In September 1973, Task Force I of the National High Blood Pressure Education Program recommended a series of antihypertensive regimens for groups with hypertension ranging from mild to severe. Hydralazine—used in combination with sympathetic-inhibiting and/or diuretic antihypertensive

agents—was a specific recommendation for "second step" and "third step" therapy in patients with diastolic pressures ranging from 105 to 140 mm Hg. Hydralazine played a prominent role in the Task Force regimens¹ because of its compatibility with almost any antihypertensive regimen. For

Apresoline can be combined advantageously with nearly all diuretics and sympathetic inhibitors.

Reference: 1. Report of Task Force I, National High Blood Pressure Education Program: Recommendations for a National High Blood Pressure Program Data Base for Effective Antihypertensive Therapy, Sept. 1, 1973, DHEW Publication No. (NIH) 74-555.



Apresoline (hydralazine)
...acts directly at the ultimate
site of hypertension
...brings something
special to almost any
antihypertensive
regimen

For brief prescribing information, please see preceding pages.



C I B

Wednesday, February 12, 1975

MEDICAL TRIBUNE

11

The Only Independent Weekly Medical Newspaper in the U.S.

Medical Tribune

and Medical News
Published by Medical Tribune, Inc.

'28% of Surgery Unnecessary'

New York Times, Dec. 15, 1974

NOW THE SURGEONS are getting it again, with a false headline based upon incomplete data. The headline blared, "Program Here Finds 28% of Surgery Unnecessary."

But the facts of the study program were different. The headline was not consistent with the text of the story, and disregarded the clearly stated qualifications and warnings against misinterpretation in the original report.

What was reported was that 28 per cent of patients to whom a physician, not necessarily a surgeon, had recommended an operation were informed by a specialist that he (the specialist) disagreed that the operation was necessary. This was before any surgery was done. There are several assumptions implicit in the headline. First, that all patients in the U.S. go to surgery on the basis of a single opinion. It is good practice and enlightened procedure to advise or accept a consultant opinion when surgery is indicated, particularly serious surgery. Thus, the series reported cannot be generally extrapolated but related only to individuals going to surgery on the basis of a single opinion. It also assumes that all medicine is "black and white"; it disregards many gray areas, and also that valid medical disagreement exists and different judgments may have comparable validity.

Orthopedic surgery, in which the report stated the largest amount of unnecessary surgery was performed, is plagued by the problems and disagreements relating to vertebral and slipped disc surgery. We are familiar with a case where a physician was advised by a neurologist and neurosurgeon not to be operated for a slipped disc on the basis of extensive diagnostic work-up. Upon the physician's insistence the operation was performed. The patient-physician proved to be right and the diagnostic work-up and the neurologist and neurosurgeon wrong.

The differences of opinions in regard to types of surgical procedures, as for breast cancer, have been widely aired.

Absolute judgments in respect to open heart surgery are not always easy to come by.

Even if one were to assume that "one out of four operations were mistaken," which they are not, one could conclude that in three cases out of four the physician was right. It would seem that instead of trumpeting that "28 per cent of surgery is unnecessary," one could calmly conclude that 72 per cent of the initial recommendations for surgery were valid when checked by consultants. Since consultation before surgery is a common practice in the United States, it is therefore probable that 80 or more per cent of surgical operations performed (both those with and without consultations) are valid. Further, 10 to 15 per cent of surgical decisions may reflect a legitimate difference of opinion, philosophy or experience. Thus 5 per cent, more or less, could be a fair approximation for "unnecessary surgery."

A record of as much as 80 to 90 per cent of accuracy in surgical decision-making in so delicate and complex an area of biologic medicine is a remarkable record of performance and an achievement reflecting the good training of the American physician. It has been said that a good executive in industry or fields less complicated than the biomedical is one who can make the right decision in 55 per cent or better of the problems he confronts. On the basis of the performance of our national economy these days (its spiraling inflation and unemployment), or on the record of crime in our cities, or on the deterioration of our housing, or on the present status of our railroad and postal systems—as well as the accuracy and quality of reports in our press, one can seriously raise the question whether government agencies or bureaucrats can come anywhere near the level of performance of physicians—and whether the press, which comments on both, can match the accuracy and responsibility of medical decisions. A.M.S.

Beauty and Beastly Bias

A RECENT editorial in Medical Tribune was titled *The Advantage of Being Female* (Nov. 20, 1974), but aside from surviving longer in this less than best of possible worlds we are not so sure. Consider the plight of three young beauties who have just run afoul of chauvinistic male regulations denying them their pulchritudinous prizes. Kathleen Beth Moore, named a Miss America finalist, resigned her Miss Washington title in protest after she was able to lose only eight of the ten pounds of flesh pageant officials demanded in preparation for the national contest. Kelly Stubbs, Miss Teenage San Diego, was forced to give up her title because

she would become twenty on December 31, disqualifying her as twenty hours overage! Helen Morgan of Great Britain, age 22, named Miss World in London, also surrendered her title because it developed that while single, as required, she had an eighteen-month son out of wedlock.

Since the Women's Lib takes a dim view of beauty contests, we will enter a protest on behalf of all three disqualified lovelies. A few pounds or years, let alone hours, hardly mar a woman's appeal, and more power particularly to Helen Morgan whose figure still won her a Miss World title after a pregnancy. R.G.



"I now pronounce you madly in love again."

©1975 Medical Tribune

LETTERS TO TRIBUNE

Trial of Dr. Shtern

Dr. Samuel Korman, chief of Oncology at State University of New York Downstate Medical Center, and Chairman of the New York Medical Committee on Soviet Jewry, has reported an urgent appeal from the family of Dr. Mikhail Shtern, a Soviet Jewish endocrinologist who had served as head of his hospital department in Vinitsa, the Ukraine, until he applied to emigrate to Israel earlier this year on May 25, 1974. A few days after submitting his application, Dr. Shtern was arrested and has since been tried on trumped-up charges of attempting to murder a young girl under his care and of accepting bribes for medicines.

Over 20 of Dr. Shtern's patients came forward during the trial to reveal that they had made false accusations against Dr. Shtern.

More than 500 physicians in the New York metropolitan area signed petitions protesting his trial, which were given by Secretary of State Kissinger to Ambassador Dobrin. Protests should be sent to the Soviet Mission at the United Nations.

Any verdict against Dr. Shtern will be appealed.

MARGY-RUTH DAVIS,
Greater New York Conference
on Soviet Jewry, New York, N.Y.

Qualifying to Vote

When the PSRO Law was first promulgated, doctor-squawks were initially put down, since, as everybody knows, doctors object to nearly everything.

Of late, however, patients have been realizing that PSRO, both by invidious intent and actual practice, will serve to reduce the availability of patient-care by tying up the doctors who practice in increasing bureaucratic after-the-fact justification (that is, to explain why they did what they did, not only on the hospital chart, but also wherever else PSRO may instruct them to do so).

Just lately, HEW has promulgated "post-admission certification" of the need for hospitalization lest the patient be summarily dismissed from hospital. This so-called "post-certification" admission is to occur within 48 hours of admission!

Medi-Cal regulations in California (Medi-Cal is California's name for Medicaid) require "pre-admission" certification for patients treated non-emergently under that program. Robert Homerin, as Chief of Field Services Section, has informed me that "prior authorization was instituted to keep the Medi-Cal Program fiscally sound." Thus, soundness of health-care and soundness of fiscal responsibility are put on opposite tracks!

Now, at last, here is my point: Not only is it full of mirth, but it also may be darn funny:

All this could have been avoided if the members of our legislative bodies could have been knowledgeable in what they were doing, that is, if they had had to submit to PSRO.

Because had that been the case, each Congressman and Senator would have had to take a test prepared by some independent testing service. In order to be able to vote on the issue, they would first have had to take the test and get a passing grade. That would have shown as well as a test can show anything that they knew enough about the law to vote on it. Whoever failed the test, well, naturally, he would not be allowed to vote.

Look at the benefits: After a term in office, some Congressmen would have shown that they knew enough to vote on nearly every issue or proposed law. On the other hand, others would have to seek re-election after explaining to their constituents why they failed to qualify for voting so many times.

It turns out in the massive social security laws, most Congressmen vote with only a knowledge of the gist of the text and a feeling for its overall import. Thus, most Congressmen did not even know what PSRO was when they voted it into law since the PSRO details were merely attached like a rider to the main bill (MT, Dec. 18, 1974).

Hence, it is clear that the concept of PSRO, if it is valid at all, should not be limited to providers of health care, but should also be extended to lawyers, judges, and especially members of our federal and state legislative bodies.

ROBERT WEINMANN, M.D.
San Jose, Calif.

Hostility to Abortion Blocks Fetal Studies

Continued from page 1

"the climate in this state right now makes it very dangerous even to perform abortions."

Dr. Nathan told the symposium that although the new law appears to permit research for diagnostic and therapeutic purposes, investigators are afraid to take any chances until its intent has been spelled out more carefully.

At the Children's Hospital Medical Center, where he is Chief of Hematology and Oncology, clinical trials have been halted on the fetoscope, a two mm. needle-sized instrument with optical lenses, fiberoptic bundles, and a sampling channel, used for examination of a fetus in utero and to obtain fetal blood samples.

The statute, which went into effect last July, is only one part of the "climate" here. Researchers will be watching the outcome of the criminal trials of five doctors who have been indicted because of their roles in undertaking federally-funded and hospital-approved fetal research and a legal abortion.

Grave Robbing Statute Used

Four physicians—Drs. Agnetta Philipson, Leon Sabath, Leonard Berman, and David Charles—have been charged with "illegal and unauthorized conveyance of human bodies or remains for the purpose of dissection," under an 1814 grave robbing statute, for their research for antibiotics effective against intrauterine infections.

The work was done at Boston City Hospital and used as subjects women scheduled to have abortions.

When the results of the study of the efficacy of erythromycin and clindamycin in passing the placental barrier were published in the *New England Journal of Medicine* in June, 1973, the article was brought to the attention of the Boston City Council.

During the subsequent eight-month investigation of abortion practices at the city hospital, Dr. Kenneth Edelin, who was then chief resident for obstetrics and gynecology, was accused of causing the death of a viable 24- to 28-week-old fetus during a hysterotomy.

The Boston District Attorney charged Dr. Edelin with manslaughter

for allegedly allowing the fetus to locate by waiting three to five minutes before removing it from the uterus.

After the indictment, Dr. Edelin was suspended by the director of the hospital; he was reinstated a week later by the Board of Trustees, who said they "found nothing in these cases indicate that anything occurred which could be considered illegal."

Dr. Edelin, the trustees said, "is nothing inconsistent with his duties... or with established hospital policy applicable to Supreme Court ruling and accepted medical practice." The 36-year-old obstetrician since he has made a member of the junior staff.

Whatever the outcome of the trials—Dr. Edelin's began January—but no date has been set for the trial—the medical community here has already felt the effect of the indictment.

Anti-abortion groups, frustrated and angered by the Supreme Court ruling on abortions, rapidly pushed through law forbidding any sort of fetal search or testing.

Doctors Caught Unprepared

Caught unprepared, the medical community did not have enough time to organize testimony that would illustrate the necessity for using abortion fetal tissue in socially worthwhile research. It was able only to soften some of the language of the law so the established diagnostic procedures and as amniocentesis might remain available.

"The medical community discovered just how society is viewing physicians today," Dr. Nathan told the symposium. "Because we are so often accused of sustaining life when there is no future for that life, it never occurred to us that society would be worried that we will not maintain life."

Professor James Smith of the Boston College Law School, who helped write the statute, told the meeting, "Feelings about abortion were neutral or if abortion were considered desirable, it would make no sense at all to be concerned about the fetus."

"In a society in which abortion is considered an undesirable solution to a problem, the question is raised whether that society is the fortunate recipient of fetal tissue, or the accomplice in an undesirable act," Prof. Smith said.

Emergency Facility Classification at Issue

Continued from page 2

tation, the American Hospital Association, and the American College of Surgeons, among others, to take the existing criteria, modify them and hopefully come up with something that hospitals, communities, and physicians will be able to live with.

The problem, as Dr. Nagel sees it, is that "we measure things we can measure, not necessarily what needs to be measured. It's all well and good to tally equipment, staffing, and support facilities. But all that can be present and yet the service could be anything from excellent to poor. Unfortunately, categorization doesn't necessarily address itself to how soon you're taken care of or how well you're taken care of. Ultimately, we have to grapple with delivery of health services."

Dutch Mobile Unit Found No Better Than Ambulance

Medical Tribune World Service

UTRECHT, THE NETHERLANDS—Mobile coronary care units do not meet with the same success everywhere. In Utrecht a "cardulance," manned by a physician, male nurse, and driver and specially equipped for cardiac resuscitation, has done no better than an ordinary city ambulance manned by a male nurse and driver.

Utrecht purchased two cardulances in 1971, then rotated them with the city ambulances on an alternate day basis in taking emergency calls. Together, they responded to 646 calls; in just over half, the diagnosis was ischemic heart disease, divided about evenly between the two vehicles. There were 21 deaths in the cardulance group, 24 in the ambulance group.

Of those with IHD, 219 had acute myocardial infarctions, again quite evenly divided between the two vehicles. Seventeen of these patients died after the cardulance arrived, one of them outside the hospital. Of the ambulance patients, 22 died, two outside the hospital.

No Statistical Difference

Analyzing the 18-month trial with both types of vehicles, Dr. Roger van Nieuwenhuizen, Utrecht University Hospital cardiologist, said, "Statistically, there was no significant difference in the results. Furthermore, it is interesting to note that a total of five patients were successfully resuscitated outside the hospital and later left the hospital alive. Of those, three were treated by the special 'cardulance' team with all their equipment, and two by the male nurse in the city ambulance. The latter two patients got mouth-to-mouth ventilation and cardiac massage in the ambulance, and were defibrillated on arrival in hospital."

On average, the cardulance arrived a little more quickly, 13 minutes compared to 25 minutes for the ambulance. The speed, equipment, and personnel of the cardulance was first rate. The answer is delay. "The median



The Utrecht team arrives at the scene of cardiac emergency, with hospital physician in the lead.



Stabilization treatment continues in the "cardulance." The patient is now receiving oxygen. ECG monitoring continues.

Budget Cuts Plague PSRO Program; Council Faces Some Hard Decisions

Continued from page 1

be a PSRO program, and if we don't get it going before then we are going to have to start over from ground zero."

Jay Constantine, professional staff member of the Senate Finance Committee, described that view as "somewhat naive." His personal opinion, he said, was that it is "very, very premature even to speculate as to whether a national health bill will be enacted this session when the total focus of the Congress is on the economy and energy."

He noted that the argument had been made that a national health bill will not affect spending in the coming fiscal year.

"Presumably the Administration was aware of that," Mr. Constantine said,

"and the conscious omission of any mention of national health insurance in the President's State of the Union message seems to imply that he would regard any national health bill, regardless of effective date, as new spending."

The picture is not totally gloomy, however, but much will depend on the performance of the existing PSROs, Mr. Constantine said. In certain circumstances supplemental monies might be available.

"If the effect of the conditional PSRO activities is a moderation in cost—not necessarily cost cutting—but a moderation in costs in terms of length of stay, costly services performed, and so forth, then it would be hard to justify not providing the necessary funding for them," he said.

How Mobile Coronary Care Units Are Doing in New York

Medical Tribune Report

How does Utrecht's experience compare with cities in the United States that have installed mobile coronary care units? Dr. William J. Grace, who set up the first mobile unit in the U.S., has analyzed the success of a variety of units, combinations of personnel, equipment and location for the American Heart Association.

Dr. Grace, who is Director of Medicine at St. Vincent's Hospital and Medical Center in New York City, agrees that delay—by patient and physician—is the paramount obstacle to successful pre-hospital care of the acute myocardial infarct patient.

The patient delays, Dr. Grace says, "because he misinterprets or denies his symptoms, and dissuades his relatives from acting for him."

But even when the patient tries to get help quickly, he may be unable to reach his physician, Dr. Grace points out. If he does reach him, "the physician may not be aware of the urgency of the problem of the middle-aged man with chest pain." And if he is aware, he may have an office full of patients or be making hospital rounds or trying to make a differential diagnosis over the telephone.

In Dr. Grace's opinion, these crucial delay factors can only be overcome by aggressively educating the public, by sharpened professional awareness—and by swiftly bringing the coronary care unit to the patient wherever he finds himself at the start of his coronary. As Dr. Webb plans a special "hear alarm" number for the city of Utrecht, so Dr.

Grace speaks of an emergency telephone number used nationwide in the United States. In each community it would, he suggests, connect directly to a central receiving and dispatching station.

About 100 Units in U.S.

There are presently 100 or so mobile coronary care units operating in the United States with every degree and type of professional in charge. The type of staffing, Dr. Grace says, is often less important than the training of the unit's staff. He points out that ambulance drivers in the U.S. receive 12 hours of training, compared to 1,000 hours for barbers.

Carefully trained nurses, firemen and other non-physician personnel who respond quickly to calls and defibrillate on the spot have had good success in this country, especially when a citizen has been able to summon the team

directly, according to Dr. Grace. How good have their successes been?

In studies of St. Vincent's Hospital's mobile coronary care unit (MCCU), Dr. Grace and his associate, Dr. John A. Chadborn, found that patients seen and treated by the MCCU team within one hour of onset of acute symptoms have a lower mortality than those patients in whom treatment is delayed for more than an hour (eight per cent versus 21 per cent). In addition, the investigators feel that the successful treatment of 21 patients with ventricular fibrillation and seven with ventricular tachycardia in the MCCU was probably life-saving.

"Mobile coronary care is effective in saving lives by resuscitation of the unconscious patient and in lowering the death rate from acute myocardial infarction. Hence, an out-of-hospital coronary care system is necessary," the investigators conclude.



Howard A. Kelly (1858-1943), first Professor Gynecology at Johns Hopkins, prepares to operate in the early 1890s. Standing across the operating table, to the left of Dr. Kelly's hand, are Thomas S. Cullen and Max Broedel.

'Hopkins Four' Exhibit Brings to Light Some Little-Known Facts and Foibles

WILLIAM OSLER, William S. Halsted, William A. Welch, and Howard A. Kelly are four of America's most revered physicians. As the first professors of medicine, surgery, pathology, and gynecology at Johns Hopkins, they were responsible in large measure for the early achievement of high repute by the school and the hospital. They have been treated in full-length biographies

and innumerable articles, and are now the subject of an exhibit at the National Library of Medicine, "The Hopkins Four," running to May 30. It examines their careers and major contributions as seen through the eyes of their contemporaries, and in the process, brings to light some little-known facts and foibles. Shown here are photographs of a few of the exhibit items.



"The Four Physicians," the famous portrait of Welch, Halsted, Osler, and Kelly, was painted by John Singer Sargent in 1905 and hangs in the Welch Medical Library in Baltimore.



"Some Welch Rabbits," another of the cartoons drawn by Max Broedel (this one in 1910), depicts William H. Welch, first Professor of Pathology, with some of the outstanding men who trained with him. Among them can be seen Simon Flexner, William G. MacCallum, and Franklin P. Mall.

"The Saint-Johns Hopkins Hospital" depicts a cherubic William Osler riding a cyclone above the hospital, below which numerous bacteria are retreating. Drawn by Broedel in 1896.

One Man...and Medicine

ARTHUR M. SACKLER, M.D.,
International Publisher, Medical Tribune



An Exchange of Letters

Dear Dr. Sackler:

I found your very clever and witty—if inane and uninformed—tirade against sterilization extremely interesting. Over the years I have found many intelligent and well educated people who seem unable to divorce facts from fiction. In your letter to Alice you said it very well: "Conclusions first, facts afterwards." For probably a variety of reasons, these individuals have an emotional hang up against sterilization and the idea that it is possible for there to be too many of us wonderful human beings upon this planet. Having reached this highly prejudicial conclusion, they then use their considerable intellectual talents in trying to defend their indefensible position. In this respect you resemble the Pope—hopefully you do not object to the comparison—who weeps when he sees the malnutrition and starvation in India but strenuously objects to the only possible remedy, effective population control.

facts afterwards"—I am not naive enough to think that any amount of scientific facts or logical arguments will alter your negative attitudes that you have held so long regarding these matters. I would also wager that you are too chicken to print this letter and will, instead, add it to your bulging reject file. But you did, after all, ask for it!

Sincerely yours,
H. Curtis Wood, Jr., M.D.
235 East Evergreen Avenue
Philadelphia, Pa. 19118

Facts and Comment

Dear Dr. Wood:

A few facts:

1. More than fifteen years ago when consulted as to the potential of sterilization for population control in India, I had advised it would be a "declaration of intellectual bankruptcy." The country which gave the greatest official embrace to sterilization and mass birth control campaigns was—India. Fifteen years later, India is pointed to as the nation which in 32 years will double its population, adding 600 million more human beings. Fact: Sterilization and birth control procedures failed in India.

2. Don't blame the Pope. Catholic and non-Catholic countries of roughly the same per capita GNP have fairly comparable growth rates. Fact: (Provided in a clipping from Dr. Wood) Catholic Italy and France will take 116 years to double their population, about the same time as non-Catholic U.S.A. Heavily Catholic West Germany has no population growth. Fact: Non-Christian countries have the highest population growth rates.

3. Low population growth rates associate most closely with low infant mortality and high GNP. Fact: Computed from WHO statistics and presented by the author at an international colloquium entitled "Social Psychiatric Implications of Population Control," sponsored by the International and American Association for Social Psychiatry in Honolulu, May 11-12, 1973.

4. You state, "It has been adequately shown that sterilization is by far the most effective and most free of undesirable effects of the many methods of fertility control." Shown by whom? Fact: Report in *Science* (Sackler et al, Jan. 19, 1973) of undesirable side effects of experimental vasoligation in rats. Report begins with the observation, "Valid social ends do not justify invalid, unscientific means."

Ignoring Recommendations

The Pope ignored the recommendations of his own commission who told him: "Future generations will hold today's leaders morally responsible if we fail to recognize and deal with the population problem while it is still manageable." Former President Nixon likewise ignored the excellent and constructive suggestions of his own Committee on Population Growth and America's Future and Dr. Sackler asks his Alice: "What population problem?"

It has been adequately shown that sterilization is by far the most effective and most free of undesirable side effects of the many methods of fertility control. It is not "the answer" and is not for everyone but for those who wish it and under certain circumstances it may be the best way to avoid future undesired pregnancies. Widely used, it could greatly reduce the demand for abortion, increase the happiness of individual couples and make a tremendous contribution in helping to solve many of our most serious social and economic problems.

But remembering—"conclusions first,

See also report that even unilateral tubal ligation has significant side effects (Thaker, Sheth and Rao, *Fertility and Sterility*, Vol. 3, 1972, and Lauma and Unijal, *Indian Journal of Experimental Biology*, Vol. 5, 1967).

A few facts have been presented. They suggest as conclusions that a population with good GNP and low infant mortality (and proper education, decent jobs, health and food) and good social security have the lowest birth rates, regardless of religion or contraceptive technology. We take no issue with the need for more research for control of conception, for greater availability of contraception technology, for freedom of choice in respect to the latter—and for abortions. We do take

issue when decent standards of income, of health and housing, education and security become secondary to The Pill. This is no time to rewrite Marie Antoinette's "Let them eat cake" into a latter day version of "Let them be sterilized. Let them take The Pill."

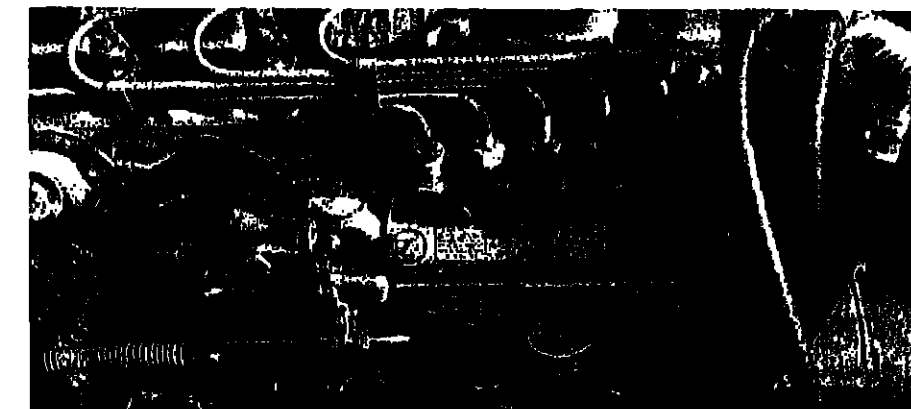
Sincerely,
Arthur M. Sackler, M.D.

EPIGRAMS—Clinical and Otherwise

The best doctors in the world are Doctor Diet, Doctor Quiet, and Doctor Merryman.

Jonathan Swift (1667-1745)
Polite Conversation, Dialogue 2

New Dieselized Dart Found To Offer Many Advantages



This diesel engine, manufactured by Chrysler in Japan, is being installed in Dodge Darts in Seattle.

Continued from page 1

What is happening is that in Lynnwood, Wash., a Seattle suburb, a firm known as "Economy Systems" is quietly converting the popular Dodge Dart, a middle-size car, to diesel power. The engine is manufactured in Japan by the Chrysler affiliate there. This six-cylinder diesel engine was initially developed for industrial use, then later modified for truck use. Economy Systems further modified its fuel injection system for automobiles. With 95 horsepower in the standard version, the performance of the car is lively, even with automatic transmission and air conditioning. This is appreciably more power than was produced by many European-made diesels.

The basic cost of the car is notably less than its European predecessor, and even with the conversion represents a real saving over the foreign model. Production in the Lynnwood, Wash., plant of 30 units per month is hardly mass production. However, the automobiles are being made available from some Dodge agencies. While not a true product of the Dodge Motor Company, the cars carry their factory warranty as new units and the engine itself is warranted by its manufacturer and by the Chrysler Corporation.

24 Miles Per Gallon?

The efficient performance of the diesel engine is well known. The Dodge diesel gets approximately 34 miles per gallon under general use—on 45¢ per gallon diesel fuel. The net cost, then, is approximately half the price per mile of travel of even the subcompact cars. If these figures are not impressive enough, consider turbo-injection. The turbo-injected model not

only develops more horsepower which improves acceleration and top speed, but in addition more fully burns the fuel, resulting in an overall increase in miles per gallon.

In addition, the diesel also is legendary in its low maintenance cost. An early Dodge conversion has been driven to over 100,000 miles without need of major overhaul.

No Pollution

One of the impressive advantages of the diesel is that it is "environmentally clean." No gasoline engine works to the efficiency of the diesel. It is so low in the production of environmental contaminants that no pollution controls or devices are needed. This not only keeps production cost down but also creates no loss of efficiency through the use of such equipment. One must remember that, though diesels produce some smoke, they do not in fact pollute.

From almost any angle, the diesel seems to have an advantage over gasoline. Remembering that diesel fuel is less likely to ignite in an accident situation, the advantages seem endless.

The major disadvantage, of course, is less horsepower which means less acceleration capability and less top speed. However, all of the currently available diesels are sufficiently lively to handle well in traffic and can exceed the posted speed limits on our highways.

Diesel does seem one hedge against gasoline prices, and the diesel Dodge seems a fully acceptable alternative, providing mid-size automobile advantages on sub-compact performance prices.

Only antihypertensive provides the three preferred modes of action.

Ser-Ap-Es®

reserpine 0.1 mg
hydralazine hydrochloride 25 mg
hydrochlorothiazide 15 mg

INDICATIONS
Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:
Effective: Hypertension. (See box warning.)

WARNING
This fixed combination drug is not indicated for initial therapy of hypertension. Hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension is not static, but must be reevaluated as conditions in each patient warrant.

CONTRAINDICATIONS
Reserpine: Known hypersensitivity; mental depression (especially with suicidal tendencies); active peptic ulcer; ulcerative colitis; electroconvulsive therapy.

Hydralazine: Hypersensitivity; coronary artery disease; mitral valvular rheumatic heart disease. Hydrochlorothiazide: Anuria; hypersensitivity to this or other sulfonamide-derived drugs. The routine use of diuretics in an otherwise healthy pregnant woman with or without mild edema is contraindicated and possibly hazardous.

WARNINGS
Reserpine: Use with extreme caution in patients with a history of mental depression. Discontinue at first sign of depression, early morning insomnia, loss of appetite, impotence, or self-deprecation. Drug-induced depression may persist for several months after drug withdrawal and may be severe enough to result in suicide. MAO inhibitors should be avoided or used with extreme caution.

Hydralazine: Chronic administration of doses over 400 mg daily may produce an arrhythmia-like syndrome simulating acute systemic lupus erythematosus. This may also occur at lower doses. Long-term treatment with steroids may be necessary and antibody titer determinations are indicated before and periodically during prolonged therapy with hydralazine or if the patient develops any unexplained signs or symptoms. Use MAO inhibitors with caution.

Hydrochlorothiazide: Use with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function.

Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte imbalance may precipitate hepatic coma.

Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potential adverse effects of the drug may be potentiated by adrenergic blocking drugs. Sensitivity reactions are more likely to occur in patients with a history of allergy or bronchial asthma.

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.

Usage in Pregnancy
Reserpine: The safety of reserpine for use during pregnancy or lactation has not been established; therefore, the drug should be used in pregnant patients or women of childbearing potential only when, in the judgment of the physician, it is essential to the welfare of the patient. Increased respiratory tract secretions, nasal congestion, cyanosis, and anorexia may occur in neonates and breast-fed infants of reserpine-treated mothers since reserpine crosses the placental barrier and appears in maternal breast milk.

Hydralazine: The drug should be used only when, in the judgment of the physician, it is deemed essential to the welfare of the patient.

Hydrochlorothiazide: Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

Nursing Mothers
Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS
Reserpine: Use cautiously in patients with history of peptic ulcer, ulcerative colitis, or gallstones (biliary colic may be precipitated). Exercise caution when treating hypertensives with renal insufficiency. Use cautiously with digitalis and quinidine. Intraoperative hypotension has occurred in hypertensive patients receiving rauwolfia preparations, but withdrawal of reserpine does not assure that circulatory instability will not occur in such patients.

Hydralazine: Use cautiously in suspected coronary artery or other arterial disease, cerebrovascular accidents, and advanced renal damage. Postural hypotension may occur, and the pressor response to epinephrine may be reduced.

In treating hypertension, current clinical practice stresses the importance of achieving control of three basic homeostatic mechanisms: fluid volume, sympathetic activity, and arteriolar tone.

Initial treatment most frequently employs one of the thiazides.¹⁻⁷

But if blood pressure resists fluid volume control with thiazides, a second agent with a different mode of action, such as a sympathetic inhibitor (reserpine), may be gradually added.²⁻⁴ Many hypertensives, however, may resist control even with a two-drug regimen.

In such cases, the crucial "third step" in combined therapy is frequently control of arteriolar tone with hydralazine.²⁻⁴

Ser-Ap-Es combines all three steps in a single tablet—all the medication many hypertensives will need.

And when the dosage of each component corresponds to the dosages pre-established by individualized titration, Ser-Ap-Es may prove more convenient and more economical.

Doses of each component in Ser-Ap-Es are lower than when used alone.

Note: Use Ser-Ap-Es cautiously in patients with advanced renal damage or cerebrovascular accident. Discontinue at first sign of mental depression.

Ser-Ap-Es is the only antihypertensive agent that provides the three basic drugs used in two published VA cooperative studies.^{8,9}

References: 1. Frels ED: Hypertension: a controllable disease. *Clin Pharmacol Ther* 13:627-632, 1972. 2. Even a little is too much. *Emergency Med* 3:144-145, 1973. 3. Bender AD, Fennell RB: Combination drug therapy in hypertension. *Del Med J* 40:2-8, 1968. 4. Bourne HR, Matson KL: Guidelines in the pharmacologic management of essential hypertension. *Relation Drug Ther* 3:1-7, 1971. 5. Russell RP: Hypertension. In: Harvey AM, Jones RJ, Owens AT, et al (eds): *The Principles and Practice of Medicine*, ed 15. New York: Appleton-Century-Crofts, 1972, pp 231-234. 6. Gilford RW: In: *Drugs for Arterial Hypertension*, ed 1. Philadelphia: Lea & Febiger, 1971, vol 1, pp 534-543. 7. Effects of treatment on morbidity in hypertension: Results in patients with diastolic blood pressure averaging 115 through 129 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 202:1028-1034, 1967. 8. Effects of treatment on morbidity in hypertension: II. Results in patients with diastolic blood pressure averaging 90 through 114 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 213:1143-1152, 1970.

Peripheral neuritis, evidenced by paresthesias, numbness, and tingling, has been observed. Published evidence suggests an anticholinergic effect and addition of pyridoxine to the regimen if symptoms develop.

Blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, and purpura, have been reported. If such abnormalities develop, discontinue therapy. Periodic blood counts are advised during prolonged therapy.

Hydrochlorothiazide: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. Observe patients for clinical signs of hypokalemia, hypochloremia, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence

serum electrolytes. Warning signs are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbance such as nausea or vomiting.

Hypokalemia may develop with thiazides as with other potent diuretics, especially during brisk diuresis, when severe cirrhosis is present, or during concomitant administration of steroids or ACTH.

Interference with adequate oral intake of electrolytes will also contribute to hypokalemia. Effects of hypokalemia especially with reference to myocardial activity.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver diseases or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather;

appropriate therapy is water restriction rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Transient elevations in plasma calcium may occur in patients receiving thiazides, particularly in those with hyperparathyroidism. Pathological changes in the parathyroid gland have been reported in a few patients on prolonged thiazide therapy.

Hyperuricemia may occur or frank gout may be precipitated in certain patients. Insulin resistance in diabetic patients may be increased, decreased, or unchanged. Latent diabetes may become manifest during thiazide administration.

Thiazide drugs may increase the responsiveness to tubocurarine. The antihypertensive effects of the drug may be enhanced in the post-sympathetic patient. Thiazides may decrease arterial responsiveness to norepinephrine. This

plus control of sympathetic activity with reserpine...

Reserpine decreases blood pressure by interfering with the release of norepinephrine at peripheral sympathetic neuro-effector sites.²⁻⁷

Sympathetic inhibition also produces a central sedative effect especially useful in management of the stress-reactive patient.

(a) Diagram of reduced arterial tone resulting

plus direct relaxation of arteriolar smooth muscle with hydralazine...

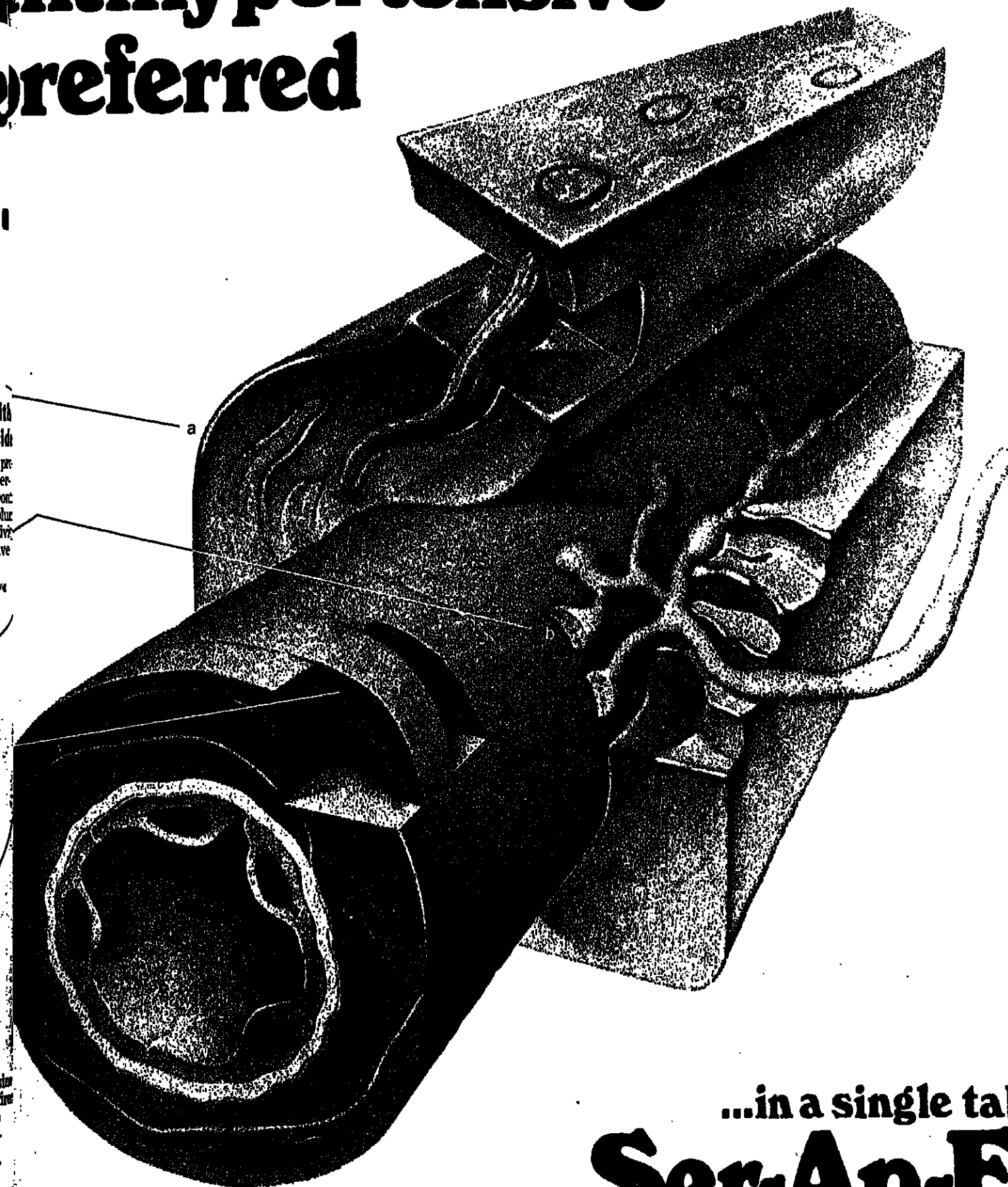
The unique action of hydralazine lowers blood pressure through direct arteriolar vasodilation to reduce peripheral resistance.²⁻⁷ The decrease in arteriolar resistance is accompanied by maintenance of regional vascular flow, making hydralazine particularly valuable for patients with slightly impaired renal flow.¹

(c) Diagram of relaxed arteriole

Only Ser-Ap-Es combines control of fluid volume with hydrochlorothiazide

Hydrochlorothiazide provides a modest antihypertensive effect through control of extracellular fluid volume and potentiates the action of other antihypertensive drugs.²⁻⁷

(d) Diagram of reduced fluid volume



...in a single tablet

Ser-Ap-Es®

reserpine 0.1 mg
hydralazine hydrochloride 25 mg
hydrochlorothiazide 15 mg

is sufficient to preclude effectiveness of the drug as agent for therapeutic use.

Bleeding tendency: Indicated onset of progressive impairment, consider withholding or decreasing diuretic therapy.

Thiazides may decrease serum PBI levels with signs of thyroid disturbance.

ADVERSE REACTIONS
Reserpine: Gastrointestinal—hypersecretion; nausea; vomiting; anorexia; diarrhea. Cardiovascular—angina-like symptoms; arrhythmias (usually with quinidine); bradycardia. Central nervous system—drowsiness; depression; paroxysmal anxiety; nightmares; parkinsonian syndrome and other extrapyramidal tract symptoms; CNS sensitization by dull sensorium, dizziness, giddiness, vertigo, and optic atrophy. Miscellaneous: Head of mouth; dizziness; headache; dyspnea;

syncope; epistaxis; purpura and other hematological reactions; impotence or decreased libido; dysuria; muscular aches; conjunctival injection; weight gain; breast engorgement; pseudotumor cerebri; gynecomastia; rarely water retention with edema in hypertensive patients.

Hydralazine: Common—headache; palpitations; ataxia; nausea; vomiting; diarrhea; lacrimation; angina pectoris. Less frequent—nasal congestion; flushing; lacrimation; conjunctivitis; peripheral neuritis; evidenced by paresthesias, numbness, and tingling; edema; dizziness; tremor; muscle cramps; psychotic reactions; transient myopia; depression; depression; paroxysmal anxiety; nightmares; parkinsonian syndrome and other extrapyramidal tract symptoms; CNS sensitization by dull sensorium, dizziness, giddiness, vertigo, and optic atrophy. Miscellaneous: Head of mouth; dizziness; headache; dyspnea;

cell count, leukopenia, agranulocytosis, and purpura; hypotension; paradoxical pressor response.

Hydrochlorothiazide: Gastrointestinal—anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (hepatopeliosis), cholelithiasis, pancreatitis. Central Nervous System—dizziness, vertigo, paresthesias, headache, xanthopsia. Dermatologic—hypersensitivity reactions, photosensitivity, rash, urticaria, necrotizing angitis, Stevens-Johnson syndrome, and other hypersensitivity reactions. Hematologic—leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia. Cardiovascular—orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics. Other—hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, rhabdomyolysis. When administered in large doses, moderate or severe, reduce dosage or withdraw therapy.

DOSEAGE
As determined by individual titration (see box warning).

Usual dosage is 1 or 2 tablets t.i.d. For maintenance, actual dosage to lowest patient requirement. When necessary, more potent antihypertensives may be added gradually in dosages reduced by at least 50 percent.

How Supplied
Tablets (dark salmon pink, dry-coated), each containing 0.1 mg reserpine, 25 mg hydralazine hydrochloride, and 15 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

C I B A

Occult Lung Bleeding Found In 3 Taking Anticoagulants

Continued from page 1

macrophages from "most" of the volunteers produced no stainable hemosiderin.

As for the frequency of occult pulmonary hemorrhage in anticoagulated patients, Dr. Golde said, "We just don't know."

The three patients, Dr. Golde said, "had severe bleeding. Minor bleeds may occur with frequency. You can get minor bleeding with no symptoms."

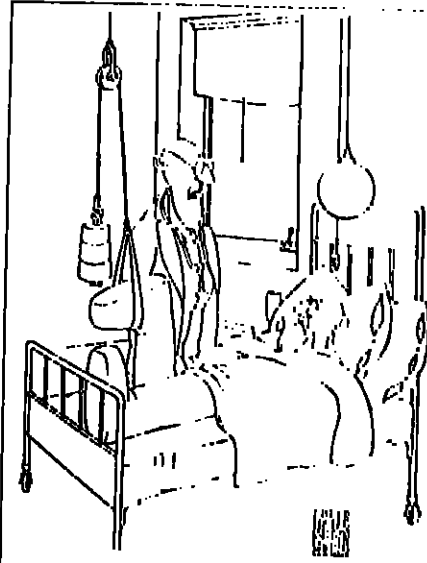
Dr. Finley, who led the development of the technique of bronchopulmonary lavage (first reported in *The Annals of Internal Medicine*, 1967), noted that the three patients had underlying disease

which may have contributed to their bleeding.

Occult pulmonary hemorrhage, Dr. Finley said, "is not a complication of anticoagulated patients that has been previously reported."

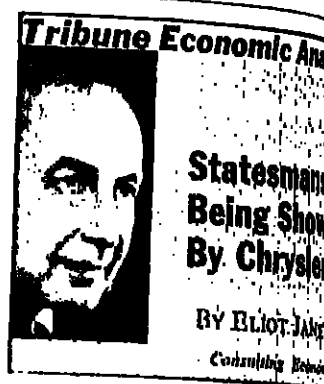
But he added that the incidence of the complication in such patients is "probably rare."

"It is very hard to diagnose pulmonary hemorrhage when the [anticoagulated patients] don't cough up blood," Dr. Golde said. "They get infiltrates on the chest. Biopsy is contraindicated because they are bleeding anyway. The only way to make the diagnosis—we believe—is with bronchopulmonary lavage."



"What do you mean, you worry about your right leg?"

©1973 Medical Tribune



Though only No. 3 in the industry, Chrysler has ranked among all 30 stocks in the Industrial Average, as well as on the board, as the juckrabbit on the

Chrysler has always had the most direct stake in rushes of into the economy. Since making two-way streets, Wall Street's way of classifying the stock has to consider it the market's fastest per share of sales volume added.

Notwithstanding Chrysler's stake in accentuating the position president Lynn Townsend has decided that counting car bodies in lots is more important than leading. He announced that it was cutting its commitments of assumption that U. S. car sales run at no more than a 6,000,000 annual sales clip, instead of one in fast.

Overnight, to its own surprise, Street is discovering that it is dependent on Chrysler leadership.

Statesmanship is not a word that ever been attributed to Chrysler management, past or present. But now, putting numerical floors on the volume of business to be done by America's big powered industry is always changing never more so than now. Recognition of the extent of the damage suffered gives the sanest protest against the wishfulness that is of exhortation as a substitute for sense of responsibility. Wall Street now on notice to look to Chrysler's next substantial recovery.

Thanks to Townsend's sense of responsibility, Wall Street now on notice to look to Chrysler's next substantial recovery.

I notice the Arabian oil producers are buying into oil-using industries: aircraft, automobiles. How do you plain that? Aren't their own oil prices ruining those industries?

Model 1. You've got it absolutely right. explanation is simpler than you think, though not so dumb. you think, though not so dumb. he puzzled because we're coming to take it and like it.

Do you see any prospect of the comment taking over the financial college education? I have four children and three will be in college and I'll be in the poorhouse. Is relief possible?

None. Better be braced to see government start reaching for new dollars from "the rich" to justify spending spree it's on. You'd start conditioning your college youngsters to work their way through college if they mean business. Starting, much less finishing. You count on state institutions to be cheap for very long, either.

ONE TWO THREE SIMPLE STEPS TO REMOVE EAR WAX

Fill external canal with the drops, with patient's head tilted at 45° angle;

Insert cotton plug and allow to remain for only 15 to 30 minutes;

Remove plug and gently wash ear with lukewarm water, using soft rubber syringe.

- Clears the ears prior to ear examination, otologic therapy or audiometry.
- Specific cerumenolytic action—excellent results reported in over 90% of 2,700 adult and pediatric patients.*
- Needs no repeated installations for several days, unlike some other agents.

Indications: Removal of cerumen; removal of impacted cerumen prior to ear examination, otologic therapy or audiometry. Contraindications: Previous untoward reaction to the drops; positive patch test. Precautions: Patch

CERUMENEX DROPS

(triethanolamine polypeptide oleate condensate 100% in propylene glycol with chlorbutanol 0.5%)

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0711 12252

first line of offense against common urinary tract invaders

Gantanol B.I.D. (sulfamethoxazole)

Basic therapy in nonobstructed cystitis*

- Because it is active against susceptible strains of *E. coli* and other organisms
- Because it is effective in nonobstructed urinary tract infections such as cystitis, pyelonephritis and pyelitis
- Because it has high patient acceptance with convenient B.I.D. dosage
- Because it is economical
- Because it is available in two convenient dosage forms—tablets and suspension

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms.

Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzazole to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis, aplastic anemia,

thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoproliferative anemia and methemoglobinemia); allergic reactions (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthritis and allergic myocarditis); gastrointestinal reactions (nausea, anorexia, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); CNS reactions (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, dizziness, vertigo and insomnia); miscellaneous reactions (drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some gonitogens, diuretics (acetazolamide, furosemide) and oral hypoglycemic agents, sulfonamides have caused rare instances of gastric production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 8 Gm (4 tabs or teasp.) initially, then 1 Gm b.i.d. or i.i.d. depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs b.i.d. Maximum dose should not exceed 75 mg/kg/24 hrs. Supplied: Tablets: 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

ROCHE
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

*due to susceptible organisms such as *E. coli*, *Klebsiella-Aerobacter*, *Staph. aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*.

Sitting pretty for years to come...

Gentle in bringing patients down to normotensive levels, Esidrix will continue to "sit right" with many of the mild hypertensives for whom you prescribe it. Indeed it can mean years and years of even, uneventful control. Esidrix. It is still unsurpassed as a basic diuretic/anti-hypertensive. And many patients with edema rarely need a more potent diuretic.

Contraindications include anuria. Use cautiously in patients with impaired renal or hepatic function.

Esidrix® (hydrochlorothiazide) for year-after-year control of mild hypertension



Esidrix® (hydrochlorothiazide)

INDICATIONS
Hypertension and edema.
CONTRAINDICATIONS
Anuria; hypersensitivity to this or other sulfonamide-derived drugs. The routine use of diuretics in an otherwise healthy pregnant woman with or without mild edema is contraindicated and possibly hazardous.
WARNINGS
Use with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma. Thiazides may be additive or potentiative of the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic blocking drugs.
Sensitivity reactions are more likely to occur in patients with a history of allergy or bronchial asthma. The possibility of exacerbation or activation of systemic lupus erythematosus has been reported.
Usage in Pregnancy
Usage of thiazides in women of childbearing age requires that the potential benefits of the drug be weighed against its possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.
Nursing Mothers
Thiazides cross the placental barrier and appear in cord blood and breast milk.

PRECAUTIONS
Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals. Observe patients for clinical signs of fluid or electrolyte imbalance (hypotension, hypochloremic alkalosis, and hypokalemia). Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication electrolytes. Warning signs are dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea or vomiting.
Hypokalemia may develop with thiazides as with diuretics, when severe cirrhosis is present, or during concomitant administration of steroids or ACTH.
Interference with adequate oral intake of electrolytes will also contribute to hypokalemia. Digoxin therapy may exaggerate metabolic effects of hypokalemia especially with reference to myocardial activity.
Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (e.g., liver disease or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice.

Transient elevations in plasma calcium may occur in patients receiving thiazides, particularly in those with hyperparathyroidism. Pathological changes in the parathyroid gland have been reported in a few hyperuricemic patients on prolonged thiazide therapy. Precipitation in certain patients. Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Latent diabetes may become manifest during thiazide administration, to tubocurarine. The antihypertensive effects of the drug may be enhanced in the post-symptomatic response to tubocurarine. Thiazides may decrease arterial responsiveness to norepinephrine. This is not sufficient to preclude effectiveness of the pressor agent for therapeutic use.
If nitrogen retention indicates onset of progressive renal impairment, consider withholding or discontinuing diuretic therapy.
Thiazides may decrease serum PBI levels without signs of thyroid disturbance.
ADVERSE REACTIONS
Gastrointestinal—nausea, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation. Central Nervous System—dizziness, vertigo, paresthesia, headache, xanthopsia. Dermatologic—hypersensitivity—purpura, photosensitivity, rash, urticaria, necrotizing angitis. Stevens-Johnson Syndrome, and other hypersensitivity reactions. Hematologic—aplastic anemia, agranulocytosis, thrombocytopenia, eosinophilia. Cardiovascular—orthostatic hypotension may occur and may be potentiated by alcohol, barbiturates, or narcotics. Other—hypokalemia, glycosuria, hyperuricemia, muscle spasm, weakness, restlessness. Whenever severe reactions are moderate or severe, reduce dosage or withdraw therapy.
DOSEAGE
Individualize dosage by titrating for maximum therapeutic response at the lowest possible dose. Hypertension—Initial dose 15 mg daily. Maintenance—After a week, dosage may be adjusted downward to as little as 25 mg or upward to as much as 100 mg daily. Combining therapy. When necessary, other antihypertensives may be added gradually and with caution because of the potential synergistic effect of this drug. Dosages of ganglionic blockers should be halved.
Edema: Init. 25 to 100 mg daily for several days. Maintenance—25 to 100 mg daily or intermittent. Refractory patients may require up to 200 mg daily.
SUPPLIED
Tablets, 50 mg (yellow, scored); bottles of 30, 60, 100, 1000, 5000 and Accu-Pak blister units of 100. Tablets, 25 mg (pink, scored); bottles of 100, 1000 and 5000.
Consult complete literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07991

C I B A

IMMATERIA MEDICA

By DUDLEY STRAUS

Domestic and foreign bulls

In this time of sex role redefinitions that are confusing many, we reprint, in their entirety, two items that indicate that bulls aren't having the same problems as male chauvinist pigs.

• **MANCHESTER, IOWA**—Two Earlville, Iowa, farmers, have filed damage suits in district court here against a Greeley, Iowa, farmer charging that the defendant's holstein bull broke into their pastures and bred a total of 43 purebred holstein heifers.

The suits were filed by Leon Offerman and William Bonert against Henry Bockenstedt. The farmers charge that Bockenstedt was negligent in not keeping his bull properly supervised and that as a result their heifers became pregnant. The two farmers seek a total of \$12,672 damages, \$7,698 for Offerman and the remainder for Bonert.

Bockenstedt said, "I just don't see how this thing could have happened. Our bull is only a six-month old calf. For the life of me I don't see how any calf that young could get in there and breed 43 heifers in just a matter of hours."

—Houston Chronicle.

• We are accustomed, courtesy of the advertisement copywriter, to think of cows as contented, but literate, that is something else again. They are to be found—unsurprisingly—in Scotland, traditionally a country where eminent divines launch themselves early by preaching to their mothers' hens. An ad in the West Highland Free Press commemorates the death of a bull—"father to many and a tender and loving mate to us all." After a four-line verse too painfully twice to regurgitate, we discover the notice has been "inserted [an unfortunate word] by the cows of the Strollamus Estate".

—New Scientist.

Trlage

"Four basic colors—bright russet, monarch gold, olive green and soft powder blue—have been used for decorating patient rooms as well as other areas throughout the medical center."

—Journal of the Travis County (Tex.) Medical Society.

You with cyanotic spleen
Will be assigned to olive (?) green.
And you, and don't you dare to cuss it.
Are going to lie in brightest russet.
And you, who now are getting old,
Will get a room of monarch (?) gold.
And finally, when it comes to you,
We've put you in soft powder blue.

• **OSAKA, JAPAN**—Pre-recorded telephone advice on dietary matters for diabetes patients is being provided at a medical electronics research center in Hokkaido, says a story sent in by one of our stringers.

"The only problem is the time taken for dialing. Up to 120 dialings may have to be made."

Meantime, brittle diabetics are urged to use smoke signals.

TRIBUNE SPORTS REPORT

Risk in Cortisone Injection For Tendon Pain Stressed

Medical Tribune Report

PORTLAND, ORE.—The risk entailed in cortisone injection in and around tendons was emphasized here by Dr. Harry Kretzler, Jr., Seattle orthopedist.

"Often when painful problems are encountered, the first consideration is a cortisone injection," he said at the American Medical Association's 16th National Conference on Sports. "Certainly, it reduces inflammation, and by so doing it relieves pain—at least temporarily."

"Of course, the first stages of healing are also inflammatory in nature, so that cortisone may well inhibit healing. If the cause of the pain is a partial tear, relief of the pain by cortisone could well lead to complete rupture with further stress."

He continued: "When presented with the problem of pain in or around tendons, one cannot pass it off as merely tendinitis and reach for a syringe and needle."

"A careful history of onset, previous difficulties in the area, the exact

anatomic site of trouble, and local findings must all be taken into account."

Dr. Kretzler cited recent Canadian studies in which rabbit Achilles tendon was injected with 0.5 cc. betamethasone. After the animals were sacrificed thirty-eight days later it was determined that the tendon that had not been injected was twice as strong as the one that had received cortisone.

Recent studies at Ohio State University, Dr. Kretzler added, also lend credence to suspicions that cortisone may do more harm than good when used without thought.

"When it comes to tendon problems resulting in pain," he declared, "physicians must follow a few basic rules—establish a diagnosis, institute appropriate care, and use cortisone sparingly and judiciously."

situation: drug-Induced constipation:

Chronic disease... requires constant medication... often several different drugs...

A number of drugs may interfere with the regular bowel action... antacids, anticholinergics, narcotics, antispasmodics, barbiturates, antihypertensives, antidepressants, tranquilizers... and many others...

laxation:

SENOKOT Tablets or Granules effectively counteract drug-induced constipation... do not interfere with primary medication... act gently and predictably.

Supplied: SENOKOT Tablets (small, easy-to-swallow)—Bottles of 50 and 100. SENOKOT Granules (delicious, cocoa-flavored)—4, 8 and 16 ounce (1 lb.) canisters.

SENOKOT® Tablets
Granules
(standardized gamma concentrate)
a natural laxative

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